State of Missouri

Department of Social Services

Division of Medical Services

E V A L U A T I O N

O F T H E

M I S S O U R I

S E C T I O N 1 1 1 5

W A I V E R

Review Period: September 1, 2003 – August 31, 2004

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INTRODUCTION

This report constitutes the sixth evaluation of the Missouri Medicaid Section 1115 Healthcare Demonstration Waiver program (1115 Waiver) and covers the period from September 1, 2003 through August 31, 2004. The 1115 Waiver, known as Managed Care Plus (MC+), expanded Medicaid eligibility to uninsured children, adults leaving welfare for work, uninsured custodial parents, uninsured non-custodial parents, and uninsured women losing their Medicaid eligibility 60 days after the birth of their child.[1] Implemented on September 1, 1998[2] , the original goals of the 1115 Waiver were to:

- reduce the number of people in Missouri without health insurance coverage;
- increase the number of children, youth, and families in Missouri who have medical insurance coverage;
- improve the health of Missouri's medically uninsured population; and
- demonstrate that not providing NEMT and requiring cost sharing wouldnot negatively impact access to medical coverage or an individual's health.

Previous evaluations completed by Behavioral Health Concepts, Inc. (BHC) and Alicia Smith & Associates, LLC (AS&A) found that the waiver expansion had:

> *Increased Rates of Insured Missourians.* Missouri reached 92% of the targeted population in the first year of the 1115 Waiver and after 26 months of operation had surpassed the original enrollment target. In February 2004 enrollment reached its peak of 91,457, slightly higher than the original estimate of the number of children **eligible** for the 1115 Waiver. Since the implementation of the Waiver rates of uninsured persons in Missouri have been lower than national rates for both children and adults.
>
> *Improved Health of Missourians.* In early evaluations, beneficiaries consistently reported high rates of satisfaction with providers compared to national and commercial benchmarks. More recently, access and utilization indicators demonstrate that the Waiver population is deriving sustained, meaningful benefits from the program.

[1] Uninsured non-custodial parents no longer covered and coverage for uninsured custodial parents and women losing their Medicaid eligibility post-partum has been reduced.

[2] Service delivery to children began September 1, 1998. Service delivery for adults began February 1, 1999.

Improved Access to Services for Children and Youth with Serious Emotional Disturbance. Beneficiaries reported that they were able to obtain needed services, and parents reported improved child functioning in the home and school setting.

Had a Minimal Crowd-Out Effect. Earlier evaluations did not find conclusive evidence of crowd-out. During this evaluation we interviewed several employers in the state who shared anecdotes of employees that declined private coverage in favor of public coverage. Nonetheless, after factoring in national studies and other information, we did not conclude that crowd-out was occurring.

SCOPE OF THE EVALUATION

This evaluation is being completed in accordance with the requirements of Missouri Senate Bill 632 and the Centers for Medicare & Medicaid Services (CMS). This report covers the evaluation period September 1, 2003 through August 31, 2004, and addresses the following questions:

- **RESEARCH QUESTION 1:** Has the 1115 Waiver expansion provided health insurance coverage to children and families who were previously uninsured?
- **RESEARCH QUESTION 2:** Has the 1115 Waiver expansion improved the health of Missouri children and families?
- **RESEARCH QUESTION 3:** What is the impact of the 1115 Waiver on providing a comprehensive array of community based wraparound services for Seriously Emotionally Disturbed Children (SED) and children affected by substance abuse?
- **RESEARCH QUESTION 4:** What is the effect of the 1115 Waiver on the number of children covered by private insurers? Does the 1115 Waiver expansion to cover children with a gross family income above 185% FPL have any negative effect on these numbers?

This report also takes a second look at the "Health Care for the Indigent of St. Louis" amendment (The "St. Louis Amendment") to the 1115 waiver. The St. Louis Amendment authorizes the use of a limited portion of Disproportionate Share Hospital expenditures to be used for two purposes: (1) to transition Connect Care, a public-private hospital in St. Louis, from an inpatient facility to an outpatient facility; and (2) to enable the St. Louis region to transition its "safety net" system of care for the medically indigent to a viable, self-sustaining model. The related research question is:

- **RESEARCH QUESTION 5:** Has the 1115 Waiver Amendment improved the health of the indigent of St. Louis City?

DATA SOURCES AND APPROACH

Our evaluation relies on the use of previously aggregated, readily available data supplied by the State of Missouri and obtained from other sources. A description of the major data sources and their uses is provided below.

Dataset/Report Name	Description
Current Population Survey/Annual Demographic Supplement – US Bureau of the Census	The Current Population Survey (CPS) is a monthly survey conducted by the Bureau of the Census for the Bureau of Labor Statistics. In March, a more comprehensive survey is conducted, which is referred to as the Annual Demographic Supplement (ADS). The CPS ADS provides national and statewide estimates of rates of insurance by type of coverage. Data from the CPS ADS were used to respond to Research Questions 1 and 4.
Health Status Indicator Rates – Missouri Department of Health and Senior Services, Community Health Information Management and Epidemiology (CHIME) Unit (Ref.: Appendix I)	The Missouri Department of Health and Senior Services, CHIME unit provided data on several health status indicators for children, including avoidable hospitalizations, emergency department visits, asthma emergency department visits, and asthma hospitalizations. These data were used in the response to Research Question 2.
St. Louis ConnectCare service utilization data (Ref.: Appendix I)	St. Louis ConnectCare provided emergency room, urgent care and clinic utilization data by department and payer to assist with the evaluation of Research Question 5.
Monthly Management Report, Department of Social Services (DSS)	The monthly management report provides point-in-time enrollment by month. This report was used to examine enrollment activity by eligibility group and region for the purpose of responding to Research Question 1.
Multiple Data Requests – DSS-Division of Medical Services (DMS), Department of Mental Health (Ref.: Appendix I)	The data associated with these requests were used in our response to Research Questions 2 and 3.

RESEARCH QUESTION 1: HAS THE 1115 WAIVER PROVIDED HEALTH INSURANCE COVERAGE TO CHILDREN AND FAMILIES WHO WERE PREVIOUSLY UNINSURED?

Recent statistics show an increase in the overall rate of uninsured in Missouri and in the nation as a whole. Missouri experienced a statistically significant increase in the overall rate of uninsured from 9.9 percent in 2000-2001 to 10.9 percent in 2001-2002. The most recently available statistics show a further increase to 11.3 percent in 2002-2003 (this increase was not statistically significant).[3] The increase in the overall rate of the uninsured in Missouri since 2000-2001 correlates with the increase in the rate of uninsured in the nation as a whole—at the national level, the overall rate of uninsured increased for the third consecutive year from 14.4 percent in 2000-2001 to 14.9 percent in 2001-2002 and to 15.4 percent in 2002-2003. When broken down by state, 20 states experienced a statistically significant increase in the rate of uninsured and only two experienced a statistically significant decrease. Of the seven states in the West North Central region (as defined by the Department of Labor), four experienced a statistically significant increase in the rate of uninsured whereas three - including Missouri – did not.[4]

The increase in the rate of uninsured across the nation has been attributed to the declining number and percentage of people covered by employer-sponsored health insurance (ESI) which itself has been attributed to:

1) increases in unemployment;
2) shifts of employment from large to small firms (or self-employment) and from industries more likely to provide ESI to those less likely to do so; and
3) the rising cost of health care, which likely affected offer rates, take-up rates (due to increases in the worker's required share of coverage costs), or both.[5]

The unemployment rate in Missouri has, in fact, increased during the past several years. Specifically, the annual average rate increased from 4.7 percent in 2001 to 5.5 percent in 2002 to

[3] DeNavas-Walt, C., B.D. Proctor & R.J. Mills (August 2004). U.S. Census Bureau, Current Pop. Reports, P60-226, *Income, Poverty, and Health Insurance Coverage in the United States:2003.* Washington, DC: U.S. Gov. Printing Office.

[4] DeNavas-Walt, et al.

[5] Holahan J. & Wang, M. (January 2004). "Changes in Health Insurance Coverage During the Economic Downturn: 2000-2002." *Health Affairs – Web Exclusive*. Available at: www.healthaffairs.org.

5.6 percent in 2003 and to 5.7 percent in 2004, an increase of 21 percent over the three-year period (nationally the rate decreased slightly in 2004 but it is still up from 2001).[6]

These recent and potentially transient phenomena notwithstanding, over the 2002-2003 period Missouri had the 14th lowest rate of uninsured in the country at 10.9 percent, well below the national average over the same period (15.1 percent).[7] Moreover, analysis of the five year period following the full implementation of the 1115 Waiver (1999-2003) points to a significant reduction in the average rate of uninsured in Missouri over the five year period prior to full implementation of the 1115 Waiver (1994-1998).[8] This is a notable achievement, particularly in light of policy changes that reduced the original coverage levels available under the 1115 Waiver and the start of an economic downturn in 2001.

Uninsured Children

The recent increase in the overall rates of uninsured people in Missouri were, in part, driven by an increase in the number and rate of uninsured children—7.3 percent in 2003, up from 5 percent in 2002 (figures 1 and 2).[9] This rate, however, is still about one-third less than the national average of 11.4 percent and is the tenth lowest in the country. In fact, had Missouri's rate been equal to the national average, there would have been an additional 57,000 uninsured children. However, on a less positive note, the national rate of uninsured children is decreasing nationally and is at an all-time low while the rate in Missouri is increasing.

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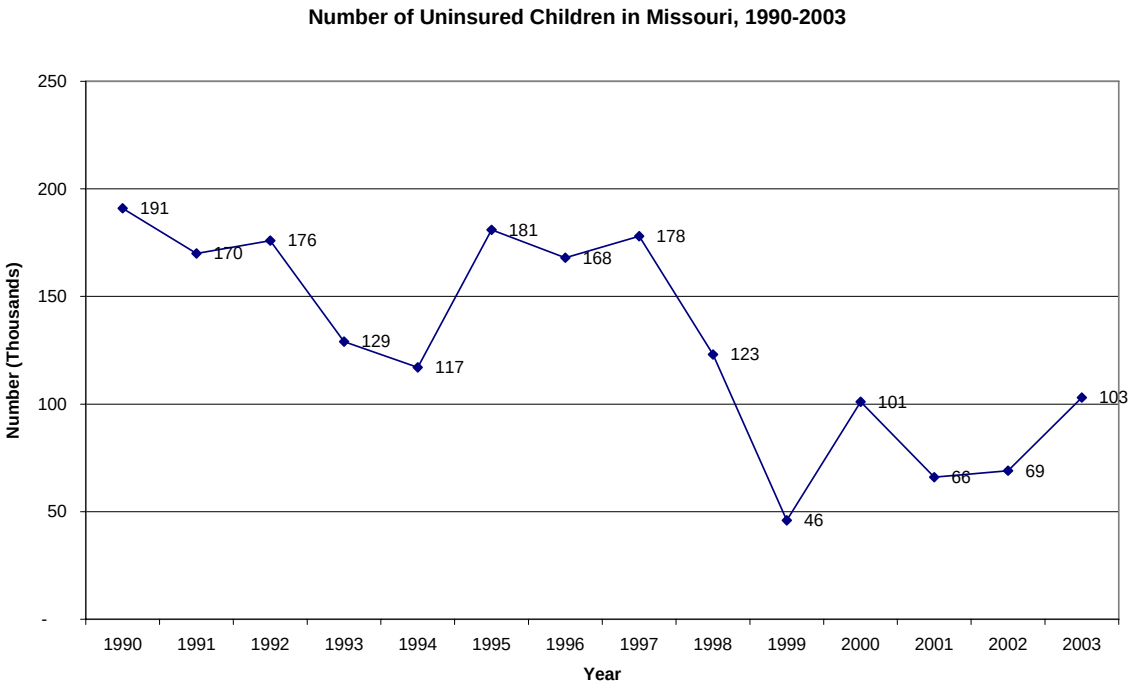
[6] U.S. Department of Labor. (February 27, 2004). *State and Regional Unemployment, 2003 Annual Averages*. Available at http://www.bls.gov; U.S. Department of Labor. (March 10, 2005). *State and Regional Unemployment, 2004 Annual Averages*. Available at http://www.bls.gov.

[7] DeNavas-Walt, et al.

[8] U.S. Census Bureau, Current Population Survey/Annual Social and Economic Supplement, Historical Health Insurance Tables, Table HI-6. Health Insurance Coverage by State – People Under 65: 1987 to 2003. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt6.html; Mills, R.J. & Bhandari, S. (September 2003). Health Insurance Coverage in the United States: 2002. U.S. Census Bureau.

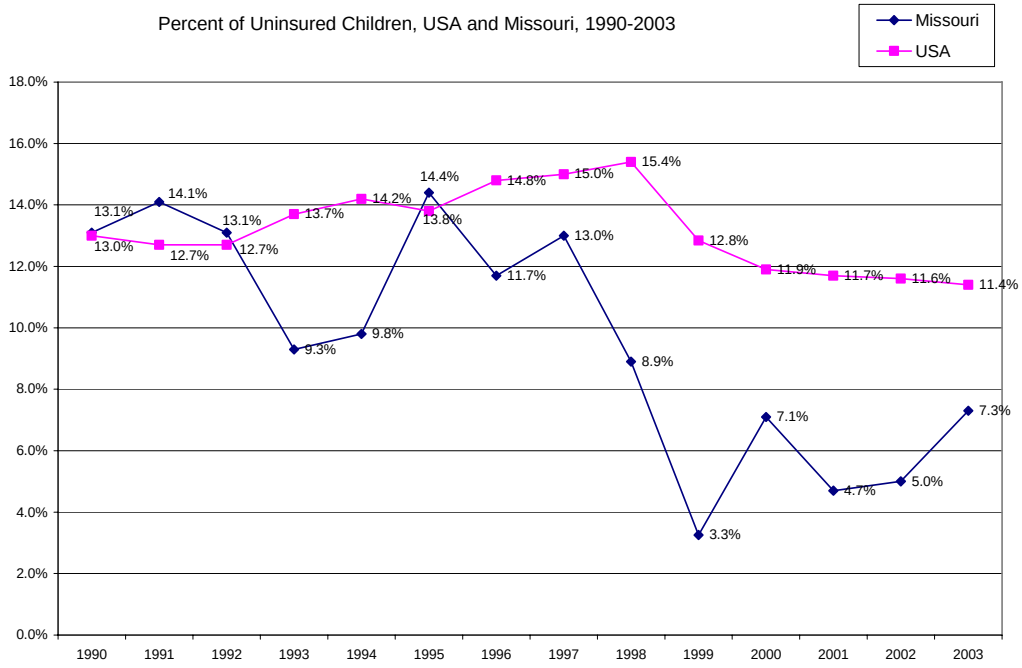
[9] U.S. Census Bureau, Current Population Survey/Annual Social and Economic Supplement, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State – Children Under 18: 1987 to 2003. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt5.html. This Census Bureau information is captured for "children" up to age 18. The waiver expansion covered "children" up to age 19. Thus, there is a slight discrepancy between the information in the Census Bureau report and the definition of *children* used for waiver eligibility purposes. This discrepancy is not expected to impact the conclusions in this report.

Figure 1



Source: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1987 to 2003. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt5.html.

Figure 2



Source: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1987 to 2003. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt5.html.

As discussed previously, much of the increase in the numbers of people without health insurance can be attributed to a decrease in the number of people with employer-sponsored health insurance. This is certainly true among children—for the third year in a row the number of children in Missouri with employer-sponsored health insurance decreased, from a peak of just over one million in 2000 to 945,000 in 2003—a 7 percent decrease. It is worth noting that at the national level children have experienced sharp declines in employer-sponsored coverage.[10]

Despite the most recent increase in the rates of children without health insurance and the annual decreases in children with employee-sponsored health insurance, longer-term analysis indicates that the state has made great strides in reducing the number of uninsured children. Specifically, the average rate during the five years prior to full implementation of the 1115 Waiver (1994-1998) is more than twice as high—11.6 percent—as the average rate during the five year period after the full implementation of the 1115 Waiver (1999-2003)—5.5 percent.[11] This decrease is in large part a result of the 1115 Waiver which has clearly provided insurance coverage to children who were previously uninsured. Stakeholders interviewed for the previous evaluation (September 1, 2002 – August 32, 2003) generally recognize the state's success in expanding health insurance to children as one of the greatest achievements of the 1115 Waiver program.

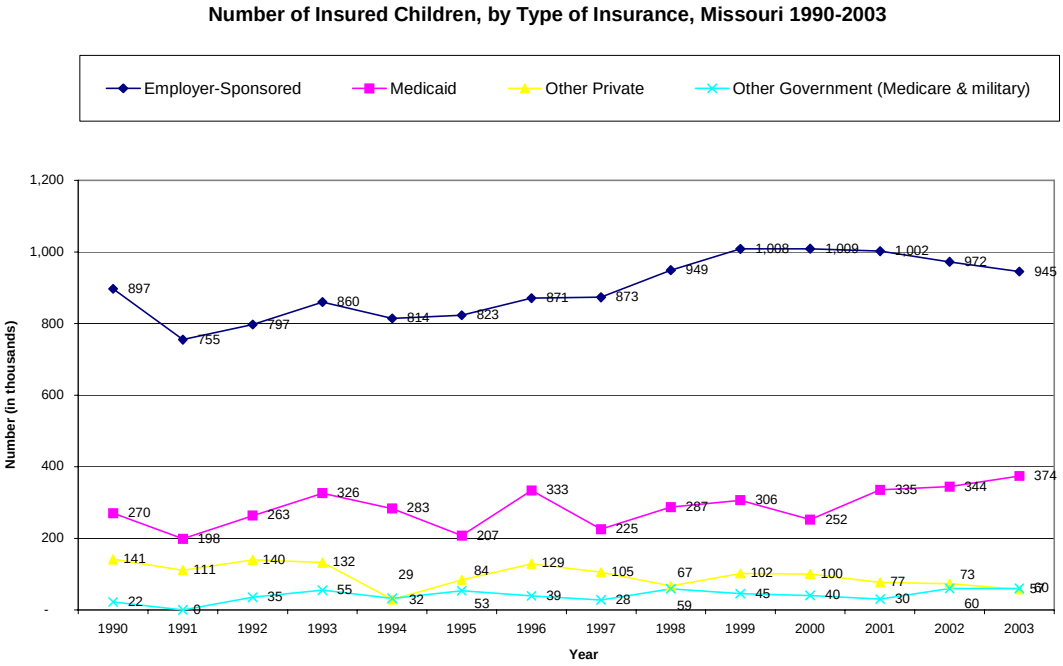
Insured Children - Types of Coverage

Between 2002 and 2003 the number of uninsured children remained stable at 1.3 million, though this number is down slightly from about 1.34 million in 2001. There has, however, been a shift in the type of insurance children have (figure 3). As discussed above, there has been a reduction in the number of children with employer-sponsored insurance. During this same period, the number of children covered by Medicaid, including those enrolled in the 1115 Waiver program, increased from about 335,000 in 2001 to 344,000 in 2002 and to 374,000 in 2003.

[10] Gould, E. (September 2004). *The Chronic Problem of Declining Health Coverage: Employer-provided health insurance falls for third consecutive year*. Economic Policy Institute: EPI Issue Brief #202.

[11] U.S. Census Bureau, Table HI-5.

Figure 3



Source: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1987 to 2003. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt5.html.

Insured Children – Enrollment in the 1115 Waiver[12]

Analysis of the State's *Monthly Management Reports for September 2003 – August 2004* suggests that enrollment increases were not distributed evenly across the Medicaid population. That is, during this evaluation period—from September 2003 to August 2004—there was no measurable change in the number of children in the traditional Medicaid program.[13] However, during this same period, the number of Missouri children in the 1115 Waiver program increased 2.5 percent, from 88,866 in September 2003 to 91,090 in August 2004.

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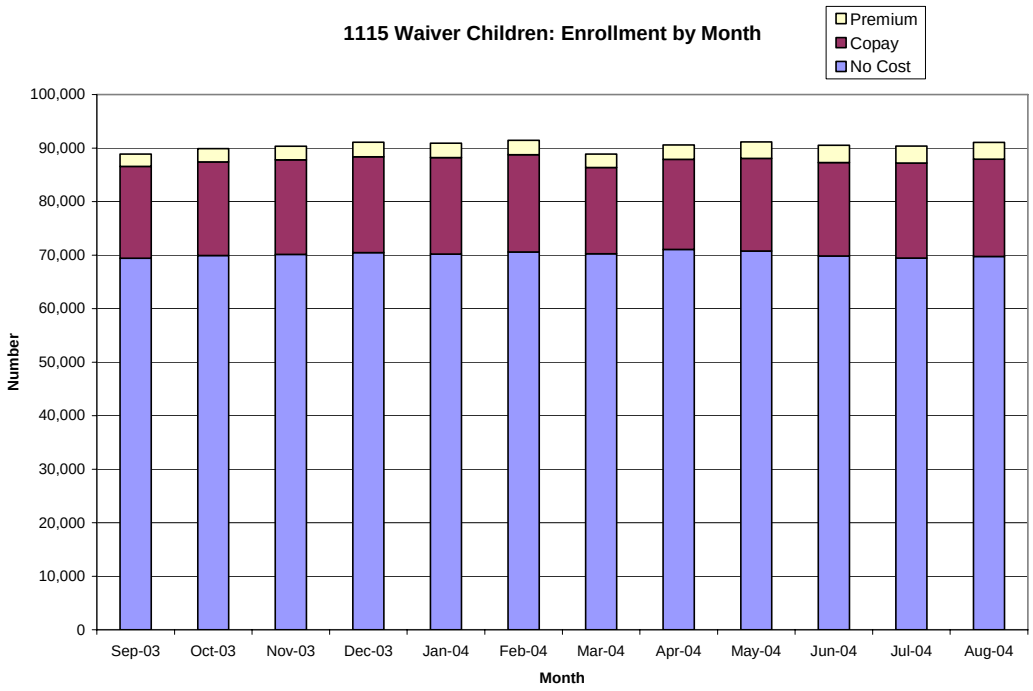
[12] It is important to note that these numbers differ from those reported in figure 3 and discussed above. This is because they are from different sources and are collected by different means. The numbers reported in figure 3 are from the Current Population Survey which is conducted once per year by the U.S. Census Bureau, while those reported here are monthly enrollment numbers reported by the state. In a May 2003 paper entitled "How Many People Lack Health Insurance and For How Long?" the Congressional Budget Office found that the number of people who report that they have Medicaid coverage in population surveys is smaller than the number indicated by the program's administrative data—one estimate was that survey undercount is between 12 and 15 percent. The Medicaid enrollment numbers in figure 2 should not be compared to those in figure 3.

[13] Missouri Department of Social Services, Family Support Division, Division of Medical Services. *Monthly Management Reports for September 2003 – August 2004*. Available at: http://www.dss.mo.gov/re/fsmsmr.htm.

Figure 4



Source: Missouri Department of Social Services, Family Support Division, Division of Medical Services. Monthly Management Reports for September 2003 – August 2004. Available at: http://www.dss.mo.gov/re/fsmsmr.htm.

These numbers are particularly impressive in light of the fact that the State of Missouri originally estimated that about 91,300 uninsured Missouri children would be eligible under the 1115 Waiver, and expected 75 percent of these children, or about 68,500, to present for enrollment. In November 2000, after 26 months of operation, enrollment of children reached 69,967, surpassing the original enrollment target and in February 2004, enrollment reached its peak of 91,457, slightly higher than the original estimate of the number of children **eligible** for the 1115 Waiver.[14]

These enrollment increases have not occurred evenly across the 1115 Waiver populations. During this evaluation period there was essentially no increase in the number of enrolled children whose families have no premium responsibilities under the terms of the 1115 Waiver (expansion families with income at or below 185 percent of the FPL)—from 69,406 to 69,764. This number peaked in April, 2004 with 71,078 children enrolled. The largest percentage increase occurred among children from those families with a co-pay responsibility (186 percent to 225 percent of the FPL)—a 5.9 percent increase. Finally, the number of enrolled children whose families have premiums and co-pay responsibilities (family incomes at or between 226 and 300 percent of the FPL) increased by 3.7 percent.[15]

[14] *Monthly Management Reports for September 2003 – August 2004*.

[15] *Monthly Management Reports for September 2003 – August 2004*

It is worth noting that the increases in this evaluation period differ from those found during the previous evaluation periods. The evaluation for September 2002 – August 2003 found that enrollment increases were limited to children whose families have the co-pay or no premium responsibilities under the terms of the 1115 Waiver (families with income at or below 225 percent of the FPL). There was, in fact, a decrease, in the number of enrolled children whose families have co-pay and premium responsibilities (family incomes at or between 226 and 300 percent of the FPL). This was the third consecutive year of enrollment decreases for this higher-income population.

Conversations with the State suggest that the recent increase in enrollment numbers among the higher premium groups and no increase in enrollment in the no premium category, a shift from previous years, are largely due to an increased emphasis on their part in conducting annual re-determinations for Medicaid and SCHIP eligibility. As a result of this increased monitoring some children have moved from Medicaid eligibility into SCHIP eligibility and others have shifted from the SCHIP no cost eligibility category into the SCHIP higher premium categories.

When analyzed by family support region, enrollment of the 1115 Waiver populations increased in three regions across the state: Southwest, Kansas City and St. Louis Region. The greatest increase in enrollment took place in the St. Louis Region. Enrollment decreased in the other three family support regions—Northwest, Northeast and Southeast—with the largest decrease occurring in the Southeast Region. [16]

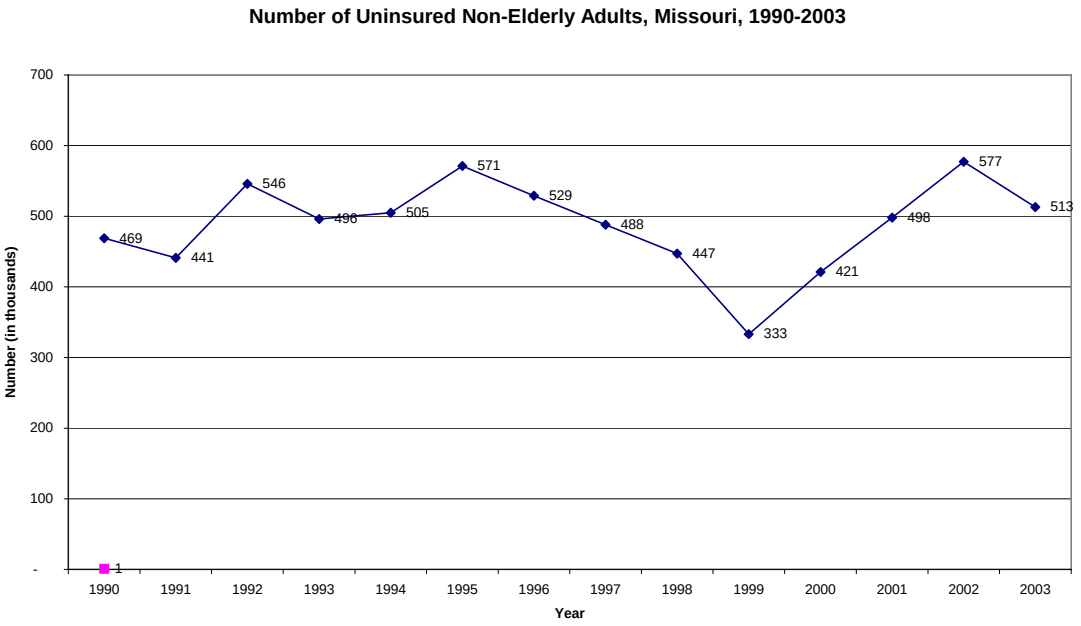
Uninsured (Non-Elderly) Adults

In 2003 the rate of uninsured non-elderly adults in Missouri decreased to 14.5 percent from 16.3 percent in 2002, which was an increase from the 2001 rate of 14.4 percent (figures 5 and 6). The 2003 rate in Missouri is about one-quarter lower than the 2003 national rate of 20.4 percent which increased from 19.5 percent in 2002. Compared to other states, Missouri has the 14th lowest rate of uninsured non-elderly adults.[17]

[16] In July 2003 the NW and SW regions each lost four counties to other regions, while the SE and Jackson - Kansas City regions gained new counties. The two previously separate regions of St. Louis County and St. Louis City were combined with two other counties to create the new St. Louis region. All comparisons in this evaluation use the newer regions since they were in effect for all of this evaluation period. However, regional comparisons to data reported in the previous evaluation should not be made since those numbers represent the previous regions.

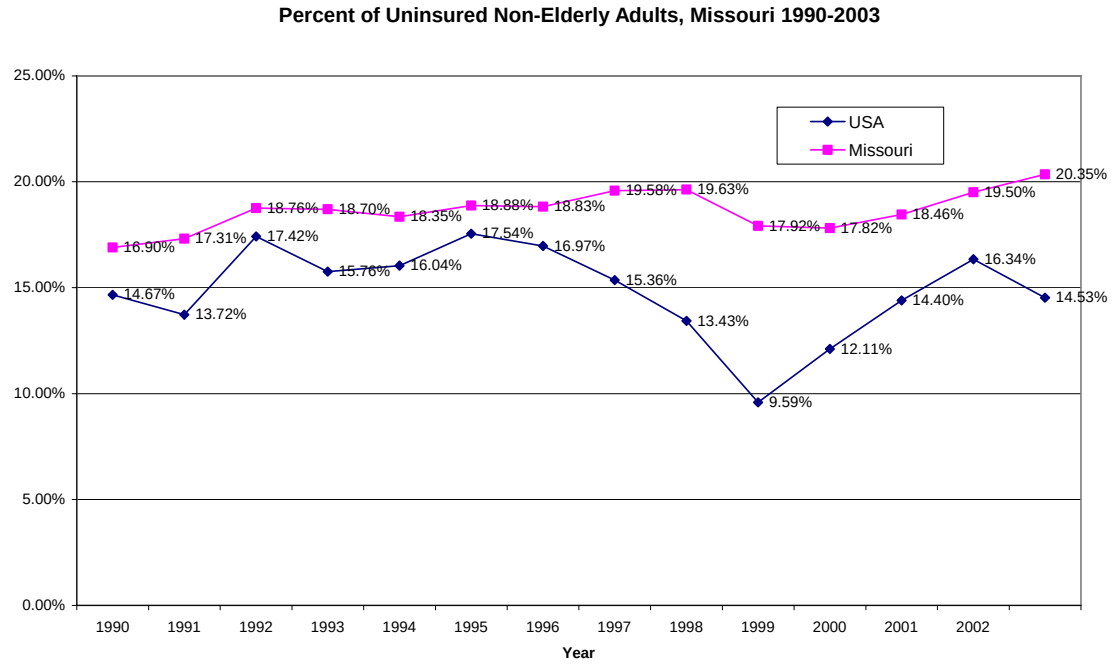
[17] U.S. Census Bureau, Table HI-5 & Table HI-6.

Figure 5



Sources: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1987 to 2003. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt5.html; U.S. Census Bureau, Historical Health Insurance Tables, Table HI-6. Health Insurance Coverage by State -- Adults Under 65: 1987 to 2003. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt6.html.

Figure 6



Sources: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1987 to 2003. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt5.html; U.S. Census Bureau, Historical Health Insurance Tables, Table HI-6. Health Insurance Coverage by State -- Adults Under 65: 1987 to 2003. Available at: http://www.census.gov/hhes/hlthins/historic/hihistt6.html.

Despite the decrease in 2003 (a decrease to 2001 rates), since 1999 - when the 1115 Waiver was initially extended to adults - the number of uninsured non-elderly adults in Missouri has increased significantly. The following budgetary changes effected after 1999 have likely contributed to this increase:

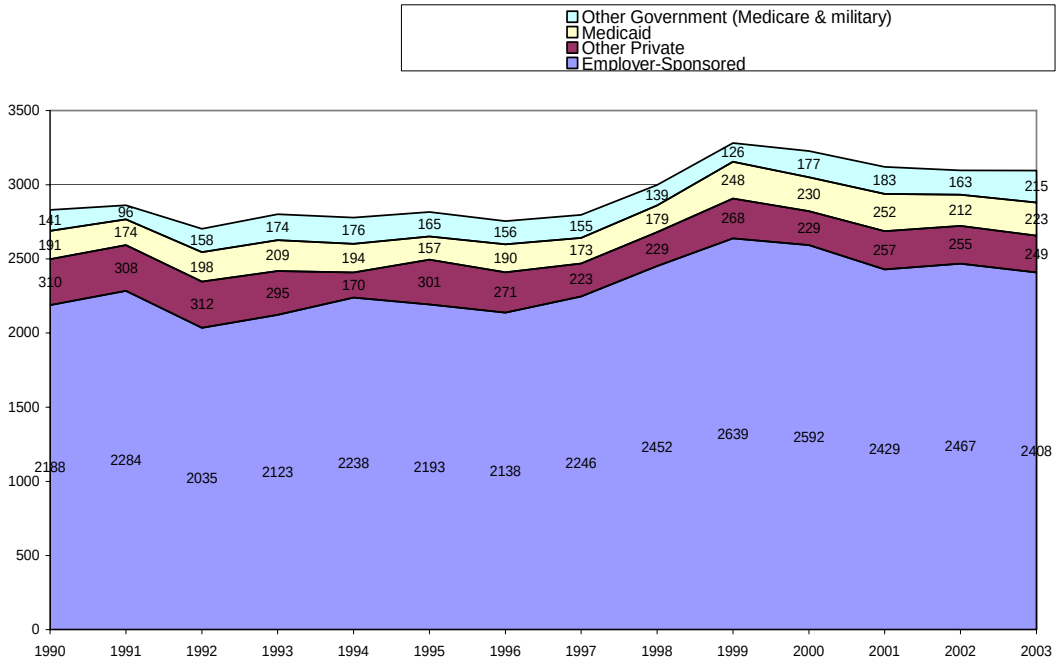
1. Effective July 1, 2002 the 1115 Waiver was modified to eliminate coverage for two adult populations: uninsured non-custodial parents below 125 percent of the FPL who are paying child support, and uninsured non-custodial parents actively participating in the Missouri Parent's Fair Share program.
2. As a way to moderate the impact of welfare reform, originally the 1115 Waiver extended two additional years of medical assistance to adults transitioning out of welfare as long as family income remained under 100 percent of the FPL. Effective July 1, 2002 medical assistance was made available for only one additional year.
3. Under the original terms of the 1115 Waiver women who were Medicaid-eligible for services up to 60 days after the birth of their child would retain coverage for women's health services for two years after delivery. Beginning in July 2002 the aforementioned services were covered for one year after delivery.

Insured (Non-Elderly) Adults - Types of Coverage

Although there was a slight increase in 2003 in the rate of adults in Missouri who had some type of insurance, the number of non-elderly adults with employer-sponsored health insurance dropped by 59,000 people (figure 7). Concurrently, the number of non-elderly adults with Medicaid increased by 11,000 people and the number with either Medicare or military coverage increased by 52,000 people. This suggests that, at least in 2003, many of the non-elderly adults who lost employer-sponsored health insurance gained government coverage—most commonly Medicare or military coverage. This loss of employer-sponsored coverage is also important because of the effect it has on the rates of insured children. Notably, as these adults lose their employer-sponsored health insurance and become both unemployed and uninsured, their children lose coverage as well. This is evidenced by the decrease in children with employer-sponsored coverage previously discussed.

Figure 7

Number of Insured Non-Elderly Adults, by Type of Insurance, Missouri 1990-2003



Source: U.S. Census Bureau, Historical Health Insurance Tables, Table HI-5. Health Insurance Coverage by State -- Children Under 18: 1987 to 2002 and Table HI-6. Health Insurance Coverage Status and Type of Coverage by State -- People Under 65: 1987 to 2002.

Over the course of the five year period of the 1115 Waiver the percent of adults with health insurance coverage has declined, from its peak in 1999. During that year just over 90 percent of all non-elderly adults were insured. Since 1999 the number has fallen, driven by both a decrease in non-elderly adults with employer-sponsored health insurance and a drop in the number of non-elderly adults with Medicaid.

Summary and Conclusions

Children

The 1115 Waiver has continued to provide health insurance to children who would otherwise be uninsured. At the end of this evaluation period, the 1115 Waiver has reached its six-year anniversary, and the enrollment results for children during this period remain favorable and have continued to increase year over year. Despite the recent promising increase in the number of children enrolled in the "premium" eligibility groups, the number enrolled is still down from the high of 3,263 children in July 2001. As pointed out in a previous evaluation, the families of these children are particularly sensitive to changes in premium requirements.

Moving forward, the State may continue to experience increases in the rates of uninsured children, not because children are not enrolling in the 1115 Waiver but because of reductions in the numbers of children with employer-sponsored health insurance. A recent analysis of national data concluded that children were particularly likely to lose employer-sponsored coverage.[18] This may be because employers are no longer offering family coverage or because, as a survey conducted in 2004 found, the average employee contributions for single coverage is essentially unchanged from 2003 while the average employee contributions for family coverage grew by 10 percent.[19] As a result, employees may be unable to afford family coverage.

Non-Elderly Adults

Regarding health insurance coverage of non-elderly adults, despite the recent increase in health insurance coverage for this population (largely a result of an increase in the number of adults receiving Medicare or other military insurance), over the five year period of the 1115 Waiver their rate of uninsured has steadily increased, both at the national level and in Missouri. This increase correlates with unemployment increases at both the state level and national level. During the Sept. 2003-Aug. 2004 evaluation period the monthly average rate of uninsured adults in Missouri ranged from 5.0 to 5.8 percent, significantly up from the historical low of 2.9 percent in January, 2000.[20]

Going forward the state may be challenged to effect additional reductions in the number of uninsured adults at a time when access to ESI is decreasing and access to government based programs, including the 1115 Waiver itself, is tightening. While public programs have filled some gaps created by the loss of employer coverage, many groups of uninsured non-elderly adults were not eligible for relief through these programs. Although non-elderly adults are free to purchase individual coverage, data show that low percentages of non-elderly adults do so. In fact, nationally, the percent of non-elderly adults with individual coverage has fallen from 7.8 percent in 1996 to 6.5 percent in 2003. During this same time period, the percent of non-elderly adults who are individual market candidates (defined as those who have individual insurance or are uninsured) has increased.[21] It is unclear to what extent proposed policy changes to introduce tax credits or to provide subsidies for the purchase of individual health insurance will increase the number of non-elderly adults with individual coverage.

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[18] Gould.

[19] The Kaiser Family Foundation and Health Research and Educational Trust. (2004). *Employer Health Benefits 2004 Annual Survey*.

[20] U.S. Department of Labor, Bureau of Labor Statistics. Available at: http://www.bls.gov/sae/home.htm

[21] Buntin, M.B., Marquis, M.S. & Yegian, J.M. (November/December 2004). The Role of the Individual Health Insurance Market and Prospects for Change. *Health Affairs* 23(6): 79-90.

RESEARCH QUESTION 2: HAS THE 1115 WAIVER IMPROVED THE HEALTH OF MISSOURI'S CHILDREN AND FAMILIES?

As in our last report, in order to evaluate the impact of the 1115 Waiver on the health of Missouri's children and families – who would otherwise be uninsured – we examined the following indicators:

- ☑ **Avoidable hospitalizations**: Hospitalizations are considered to be avoidable when the associated primary diagnosis is for a preventable or manageable illness;[22]
- ☑ **Utilization of emergency services;**
- ☑ **Utilization of preventive and wellness services;** and
- ☑ **Frequency of medical and non-medical grievances** filed by or on behalf of the 1115 Waiver population. Since one of the desirable outcomes associated with the 1115 Waiver is an improvement in health status, improved health status should be reflected in a decreased frequency of grievances or in a favorable change in the mix of grievances.

These indicators and the data used to compute these indicators were compiled and provided to us by the Department of Social Services (DSS) and the Department of Health and Senior Services (DHSS). We strongly believe that when brought together these indicators provide considerable insight into the health of the population being studied.

Avoidable Hospitalizations and Emergency Room Use

Our analysis of avoidable hospitalizations and utilization of emergency services covers calendar years 1999 through 2003, the period following the implementation of the 1115 Waiver for which complete, validated information was available. Information was collected for three distinct populations:

1. Children eligible for medical assistance under the 1115 waiver (1115 Waiver Children);
2. Children otherwise eligible for medical assistance (Other Medicaid Children); and
3. Children not eligible for any medical assistance; this group consists primarily of individuals with commercial, i.e. private health insurance (Non-Medicaid Children).

As was done last year, in the absence of historical, "baseline" data on the 1115 Waiver Children population we opted to ascertain the effect of the 1115 Waiver on children who otherwise would have been uninsured by comparing the experience of the three populations during a common time period.

[22] From "Missouri Monthly Vital Statistics", 29(4), 1995, State Center for Health Statistics, Missouri Dept. of Health:.The diagnoses associated with avoidable hospitalizations in this study are: Angina; Asthma; Bacterial Pneumonia; Cellulites; Chronic Obstructive Pulmonary Disease; Congenital Syphilis; Congestive Heart Failure; Dehydration; Dental Conditions; Diabetes; Epilepsy; Failure to Thrive; Gastroenteritis; Hypertension; Hypoglycemia; Kidney or Urinary Infection; Nutritional Deficiencies; Pelvic Inflammatory Disease; Severe Ear, Nose or Throat infection; Tuberculosis.

Our analysis extended beyond statewide statistics – it also looked for potential disparities across the three managed care regions and the rest of the state (the "fee-for-service region"), including those that may be caused by the varying degrees of managed care rigor that exist in each managed care region. To that end, for each of the three distinct populations the requested information pertaining to each indicator was stratified by 1115 Waiver region.

Avoidable hospitalizations – all applicable diagnoses

The American Academy of Pediatrics points to the rate of hospitalizations for ambulatory sensitive conditions (asthma, diabetes, gastroenteritis, etc.) as a recommended indicator for evaluating the impact of SCHIP programs, as high rates of avoidable hospitalizations may indicate lack of access to or insufficient utilization of primary care services. Consistent with this premise we examined the following indicators related to the use of these services during calendar years 1999 through 2003:

1. Rates of avoidable hospitalizations/all applicable diagnoses; and,
2. Rates of avoidable hospitalizations/*asthma* primary diagnosis.

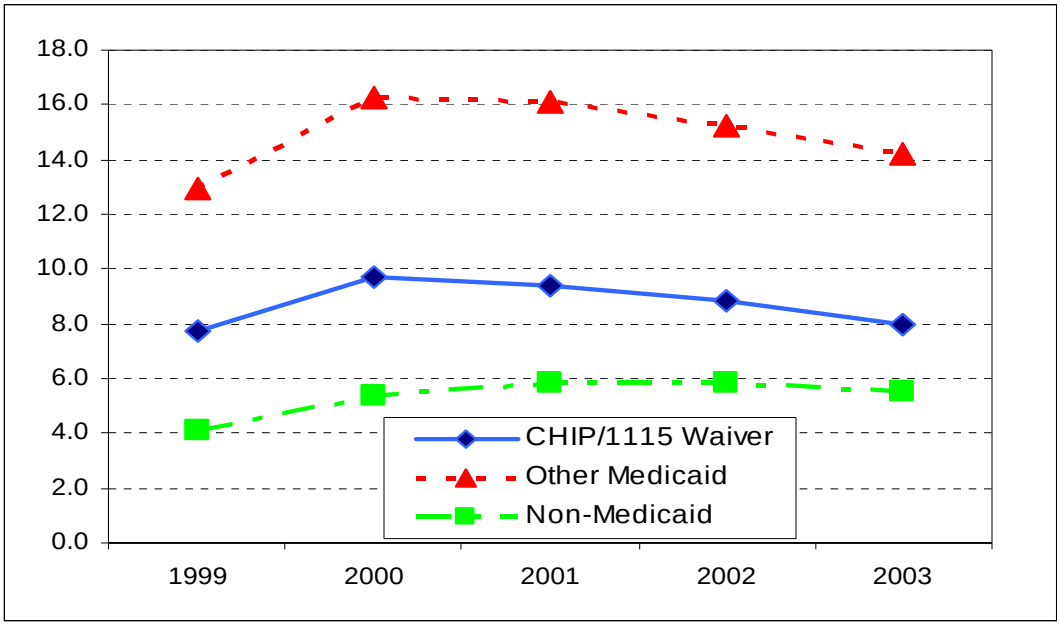
The avoidable hospitalization rates for children in the study populations are shown in Figure 8. Overall, hospitalization rates continued on their downward trend during 2003 – down almost five percent between 2002 and 2003. This was on top of a decrease of approximately five percent between 2001 and 2002.

- While the hospitalization rates for children in the Other Medicaid population decreased significantly between 2002 and 2003, the 1115 Waiver rate was considerably lower – **44** percent lower – than the Other Medicaid rate. The difference between the two rates did not change in a statistically significant manner between 2002 and 2003. Moreover, the aforementioned observation applies to every year of the study.
- While the 1115 Waiver rate in 2002 was higher than the Non-Medicaid rate, the gap between the use rates of these two populations has been steadily decreasing. In 1999, the 1115 Waiver rate was almost twice as high as the Non-Medicaid rate; by 2003 the difference in the use rates had been reduced by more than half. Moreover, from a statistical perspective the Non-Medicaid rate has not changed in the last four years, whereas the 1115 Waiver rate has decreased steadily since 2000, down almost 20 percent in 2003 from its 2000 level.
- The 1115 Waiver rate continues to approach the 1998 benchmark rate (7.2 per 1,000 population) computed using data from the National Hospital Discharge Survey.[23] Moreover, over the last three years of the study the decrease in the 1115 Waiver rate (17.5 percent) exceeded the decrease that the national rate experienced over an eighteen-year period.

[23] "Trends in Avoidable Hospitalizations, 1980-1998"; Kozak, Hall and Owings; Health Affairs; Mar./Apr. 2001; p. 225-232.

Figure 8: Avoidable hospitalizations per 1,000 population, Missouri age <19.

Data Source: Missouri Department of Health and Senior Services



Avoidable hospitalizations – asthma primary diagnosis

The asthma hospitalization rates for children in the study populations are shown in Figure 9.

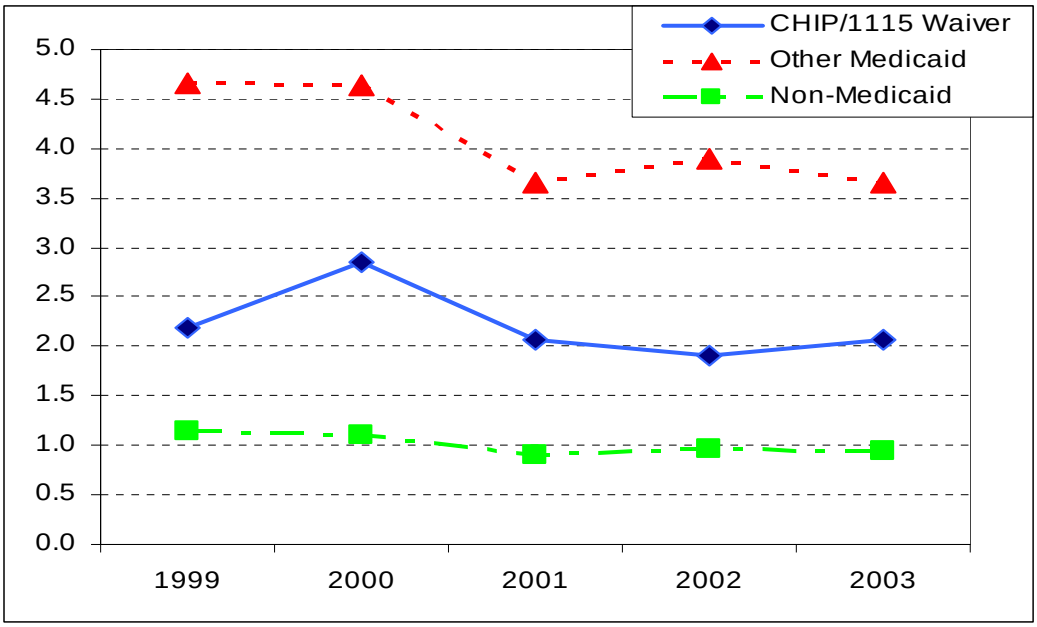
- The hospitalization rates for children in the 1115 Waiver and Non-Medicaid populations experienced little or no change between 2001 and 2003.
- For the fifth consecutive year the 1115 Waiver rate was considerably lower – 44 percent lower – than the rate for the Other Medicaid population.
- Also for the fifth consecutive year, the hospitalization rate for the 1115 Waiver population fell between that of the two other groups.
- For the last three years of the study the 1115 Waiver rate has remained below the Healthy People 2000 target rate of 2.25 asthma hospitalizations per 1,000 children.[24] This result is particularly noteworthy given that presumably many if not most of the children in the 1115 Waiver program meet one or more of the following criteria shown to double or triple the likelihood of an avoidable hospitalization: prior diagnosis of asthma, adolescent age, family with working poor income, previously uninsured.[25] Moreover, according to a study published in 2003, pediatric asthma hospitalizations have increased an average of 1.4 percent per year since 1980, a trend not evident in the 1115 Waiver population's statistics.

[24] Healthy People 2000 report: http://www.cdc.gov/nchs/data/hp2000/hp2k01-acc.pdf

[25] "Keeping children out of hospitals: parents' and physicians' perspectives on how pediatric hospitalizations for ambulatory care-sensitive conditions can be avoided". Pediatrics; 11/1/2003; Sun, Donglin.

Figure 9: Avoidable hospitalizations per 1,000 pop., asthma primary diagnosis, Missouri, age <19.

Data Source: Missouri Department of Health and Senior Services



ER visits - all

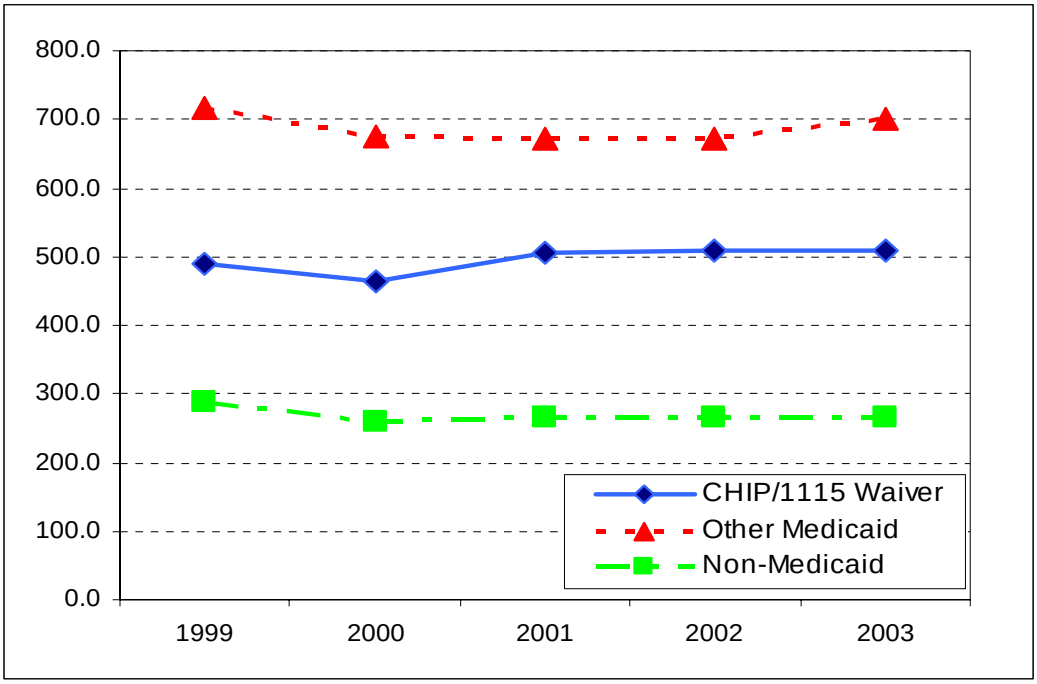
In the aggregate, the trends for emergency room utilization (ref. Figure 10) are consistent with those observed in the avoidable hospitalizations data.

- From a statistical perspective, the ER use rate for children in the 1115 Waiver population remained constant between 2002 and 2003. The use rate for children in the Non-Medicaid population also experienced little or no change during the same period.
- For the fifth consecutive year the Other Medicaid population had the highest ER use rate, 38 percent higher than the rate for 1115 Waiver children.
- Also for the fifth consecutive year, the ER use rate for the 1115 Waiver population fell between that of the two other groups, at 509 visits per 1,000 members.
- The 1115 Waiver rate is higher than the 2001 national benchmark rate (about 384 visits per 1,000 population) derived from CDC statistics.[26] A significant percentage of the difference can be attributed to the use of ER services in the fee-for-service 1115 Waiver region of the state, which are as much as 27 percent higher than in the managed care 1115 Waiver regions. Additionally, as noted in last year's report the 1115 Waiver ER use rate in the managed care regions was at or below the previously referenced national benchmark as recently as 2000. Since then the ER use rate in these regions has experienced an increase.

[26] Health, United States, 2004 with Chartbook on Trends in the Health of Americans. http://www.cdc.gov/nchs/data/hus/hus04trend.pdf#076

Figure 10: ER visits per 1,000 population, Missouri, age <19.

Data Source: Missouri Department of Health and Senior Services



ER visits - asthma

There was a positive development between 2002 and 2003 in the asthma-specific ER visit trends (ref. Figure 11). The use rates across all three study groups decreased between 2002 and 2003, with the 1115 Waiver rate decreasing by almost 7 percent, to 12.3 visits per 1,000 population.

- The ER-asthma use rate for the 1115 Waiver population was more than 30 percent lower than the rate for the Other Medicaid population.
- In every year of the study the 1115 Waiver ER-asthma use rate has been higher than the 2002 national benchmark (10.0 per 1,000 population) as reported by the CDC.[27] It should be noted that on average the use rate in the more rural regions of the state (Central and Fee-for-Service "Other") has been lower than the aforementioned benchmark in every year of the study. The Eastern and Western regions are more heavily urban, and several studies suggest that the prevalence of asthma and related illnesses should be expected to be higher in these regions.[28]

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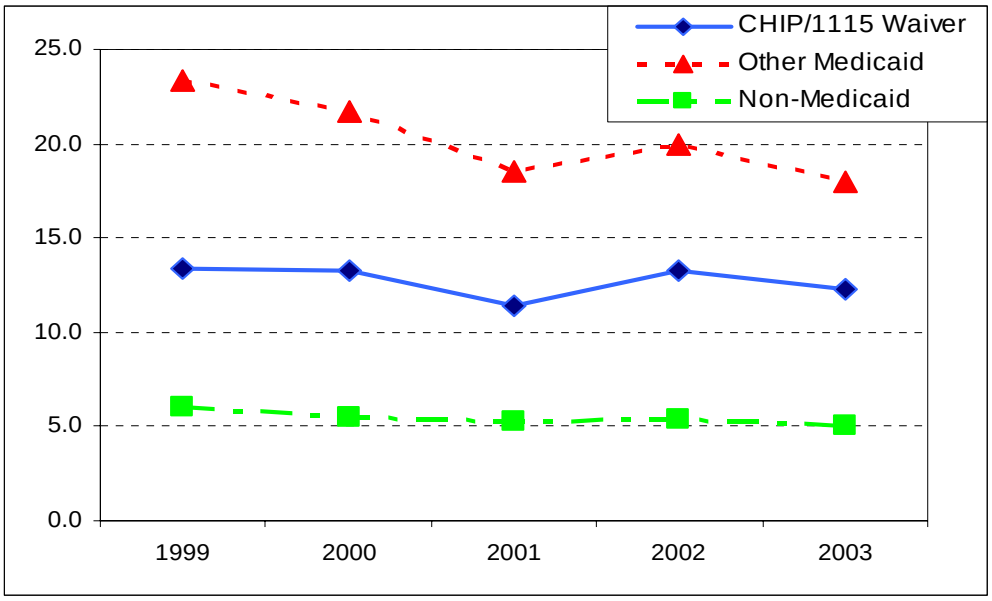
[27] Asthma Prevalence, Health Care Use and Mortality, 2002; fact sheet by the National Center for Health Statistics; last updated February 08, 2005. http://www.cdc.gov/nchs/products/pubs/pubd/hestats/asthma/asthma.htm

[28] (a) Prevalence of asthma in urban and rural children in Tamil Nadu; Chakravarthy S., Singh R.B. and Swaminathan S., Venkatesan P; National Library of Medicine; Sep-Oct 2002. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12502136&dopt=Abstract
(b) "Childhood asthma and urban geography'; Nagourney E.; New York Times; Sept. 29, 2000. http://library.uchc.edu/bhn/cite/nyt/3245asthma.html
(c) Disproportionate Air Pollution Burden and Asthma in Urban Communities; Clark S. and Shat J.; published by the Harvard School of Public Health. http://www.med.harvard.edu/chge/textbook/papers/Clark.pdf

Figure 11: ER visits per 1,000 population, asthma primary diagnosis, age <19.

Data Source: Missouri Department of Health and Senior Services



Regional Variations – 1115 Waiver Population

The health indicators for each population were also compared across 1115 Waiver managed care regions and the parts of the state that have remained fee-for-service. Some regional variations should be noted:

- Across all three study groups, the fee-for-service part of the state continues to have the highest rates of avoidable hospitalizations and emergency department visits. On average, ER utilization rates in the fee-for-service area have been about 20 percent higher than in the managed care regions, with the avoidable hospitalization differential at about 10 percent. The variance between the fee-for-service and the managed care regions is even greater when asthma-related activity is backed out of the comparison. The latter statistic could be a function of several factors, including the fee-for-service area being predominantly rural (access to primary care services may be less than adequate in this area) and containing some of the poorest sections of the state (southeastern Missouri, south of Kansas City).
- As noted earlier, there continues to be significant variation in asthma-related activity across regions. The regions with the largest urban populations – the Western region and particularly the Eastern region – continue to have use rates for asthma-related activity that are considerably higher than in other parts of the state.
- The minor yet apparent up-tick in ER utilization across all regions may merit further study.

Utilization of Preventive and Wellness Services

We examined the degree to which the 1115 Waiver populations were able to access and receive the following preventive and wellness services:

1. Well baby physician/clinic services;
2. Well child physician/clinic services; and,
3. Child and adolescent preventive immunizations.

The services examined in this part of the analysis are consistent with the definition of early preventive, screening, diagnostic and treatment (EPSDT) services contained in the Omnibus Budget and Reconciliation Act of 1989 (OBRA 89) and in rules and regulations managed by CMS including those pertaining to EPSDT reporting.[29]

Analysis

To conduct our analysis we requested data from the Division of Medical Services (DMS) of the Department of Social Services on the monthly utilization of preventive and wellness services by 1115 Waiver children and non-waiver medical assistance children spanning the period of January 2002 and June 2004. This time period extends for 30 months because we were aiming to establish a history of utilization that would support analysis and inferences based on such analysis that could be deemed *statistically significant*. In keeping with Federal guidelines, a service was deemed "preventive" and/or "wellness" when the provider assigned one of a set of procedure codes and a preventive diagnosis code to the encounter.[30]

It was our goal to compare utilization of preventive and wellness services among the 1115 Waiver populations to the medical assistance populations outside of the 1115 Waiver - Other Medicaid - thereby establishing the utilization of these services by the Other Medicaid population as a point of reference. Purportedly the *minimum desirable outcome* would be for the 1115 Waiver population to access these services at a rate comparable to that of all other children in Missouri's medical assistance programs. However, the service counts generated out of the data for the non-waiver population suggest that there are completeness issues with the data set for this population - the totals appear too low especially when compared to national norms, and they are an order of magnitude lower than the 1115 Waiver population's. Identifying the root cause of these potential data completeness issues and addressing it during the next evaluation cycle would enable the statistically valid comparison between the 1115 Waiver

[29] http://www.cms.hhs.gov/medicaid/epsdt/default.asp

[30] Preventive diagnosis codes in-scope included: V20-V20.2, V70.0 and V70.3-V70.9. Procedure codes in-scope included: 99381-99385, 99391-99395, 99431-99432, 99201-99205, 99211-99215, 90476-90748.

and non-waiver populations. In light of these data problems, this analysis will be limited to a general discussion of utilization patterns of the 1115 Waiver population and a comparison of utilization patterns between FFS and HMO subsets within the 1115 Waiver population (note: there were additional concerns about the quality of the data for three months - Jan. 2002-Mar. 2002 - within the requested time period, but they were not sufficient to preclude this analysis).

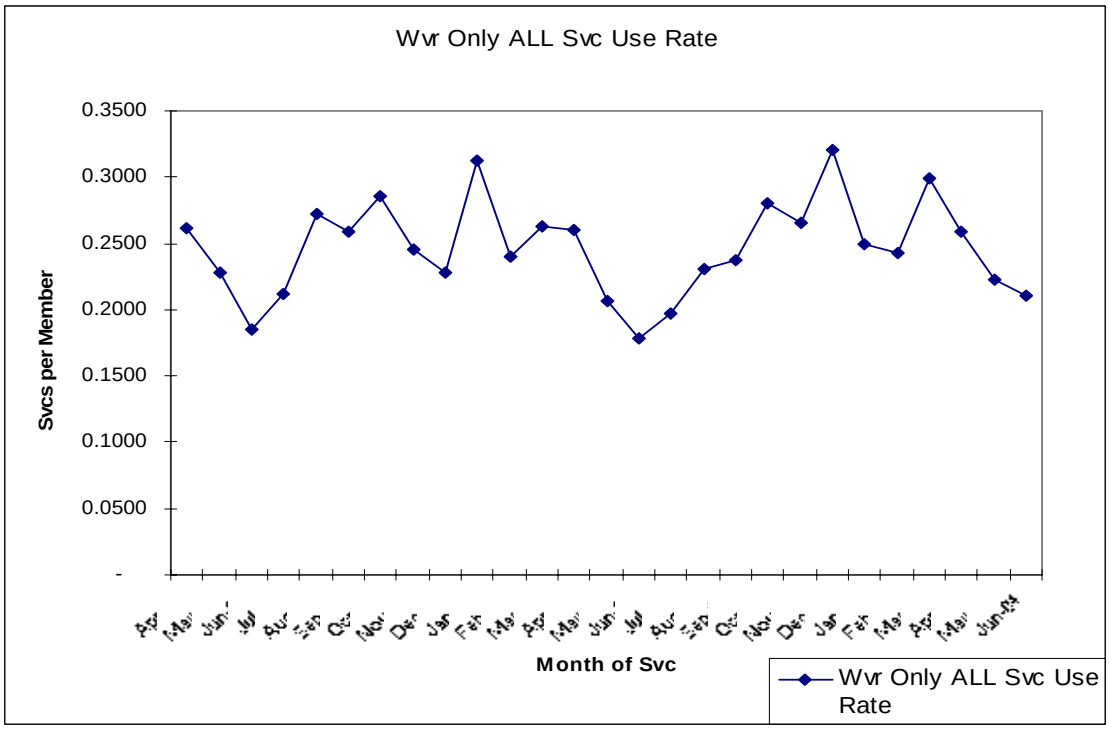
Observations

Overall statistics

The utilization by month of these services by the 1115 Waiver population is illustrated in Figure 12. The predictable seasonal variations notwithstanding (e.g. activity drops during the summer vacation months and spikes right before the start of a school year and again around January-February), the mean utilization of these services by the 1115 Waiver population across all age groups was fairly consistent during the study period at approximately 0.25 services per enrollee per month, or about 3 per year.

Figure 12: Preventive and wellness services per enrollee (average), children in 1115 Waiver population, April 2002 – June 2004.

Data Source: Missouri Department of Social Services, Division of Medical Services

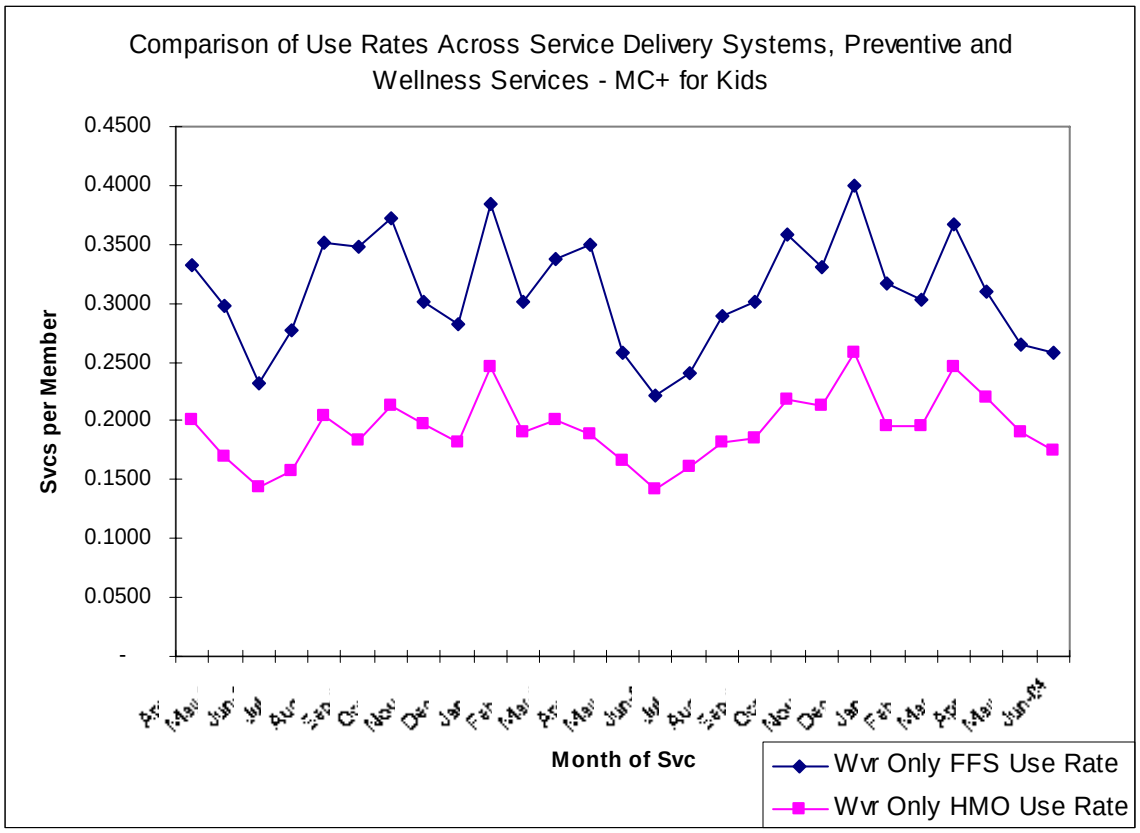


Variations within the 1115 Waiver population - by service delivery system (FFS vs. HMO) and age

The monthly utilization of services varied significantly between service delivery systems, with the fee-for-service (FFS) population subset utilizing these services at approximately a 60 percent greater rate than the HMO subset (ref. Figure 13).

Figure 13: Preventive and wellness services per enrollee (average) by service delivery system, children in 1115 Waiver population by subset, April 2002 – June 2004.

Data Source: Missouri Department of Social Services, Division of Medical Services



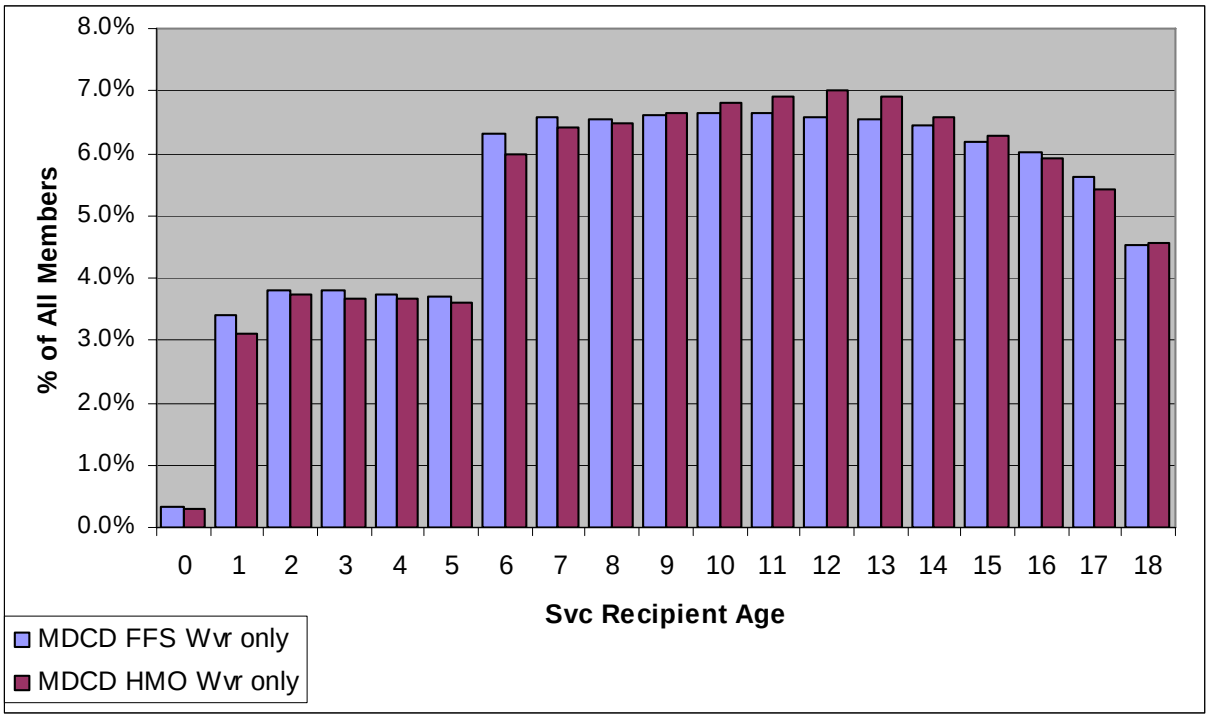
There are many possible explanations for this phenomenon, which we believe merits further study, including a significantly different age distribution between the two subsets with the FFS subset having a larger percentage of younger enrollees that tend to use more of these services. Detailed analysis of the DMS data does not support this explanation, as the age distribution within both subsets is very similar (ref. Figure 14).

Testing other explanations for this phenomenon is strongly recommended; these include but are not limited to:

- Environmental factors;
- Cultural factors;
- Degree of urbanization;
- Educational levels;
- Availability of educational materials;
- Coverage of outreach services;
- Enrollee health status at intake/enrollment; and,
- The effect that HMOs may be having on the use of certain services, or, conversely, the relative facility with which services can be accessed in a fee-for-service environment.
- The aforementioned lack of completeness of the analyzed data set, perhaps caused by encounter data reporting issues. Payment arrangements, such as capitation, that HMOs may have with certain providers could also be affecting the completeness of this data set.

Figure 14: Percentage of 1115 Waiver members by "population subset" (FFS vs. HMO), April 2002 – June 2004.

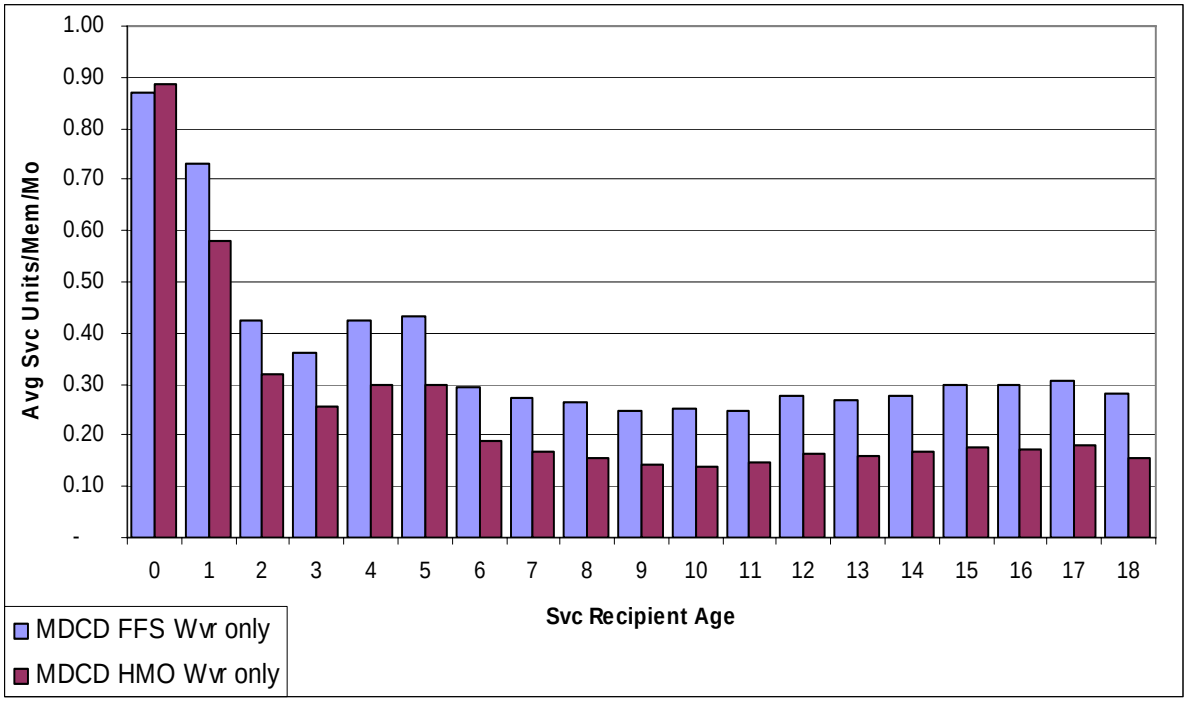
Data Source: Missouri Department of Social Services, Division of Medical Services



An age-related observation that may shed light on the phenomenon is highlighted in Figure 15. Newborns and infants up to age one appear to access these services at about the same rate regardless of delivery system. The use rates between the two subsets begin to progressively diverge once enrollees reach the age of one – by age four the divergence is approximately 40 percent, and by age seven it reaches 70 percent (which is the average from age eight to eighteen).

Figure 15: Preventive and wellness services per enrollee (average) per month by service delivery system and 1115 Waiver population subset (FFS vs. HMO), April 2002 – June 2004.

Data Source: Missouri Department of Social Services, Division of Medical Services

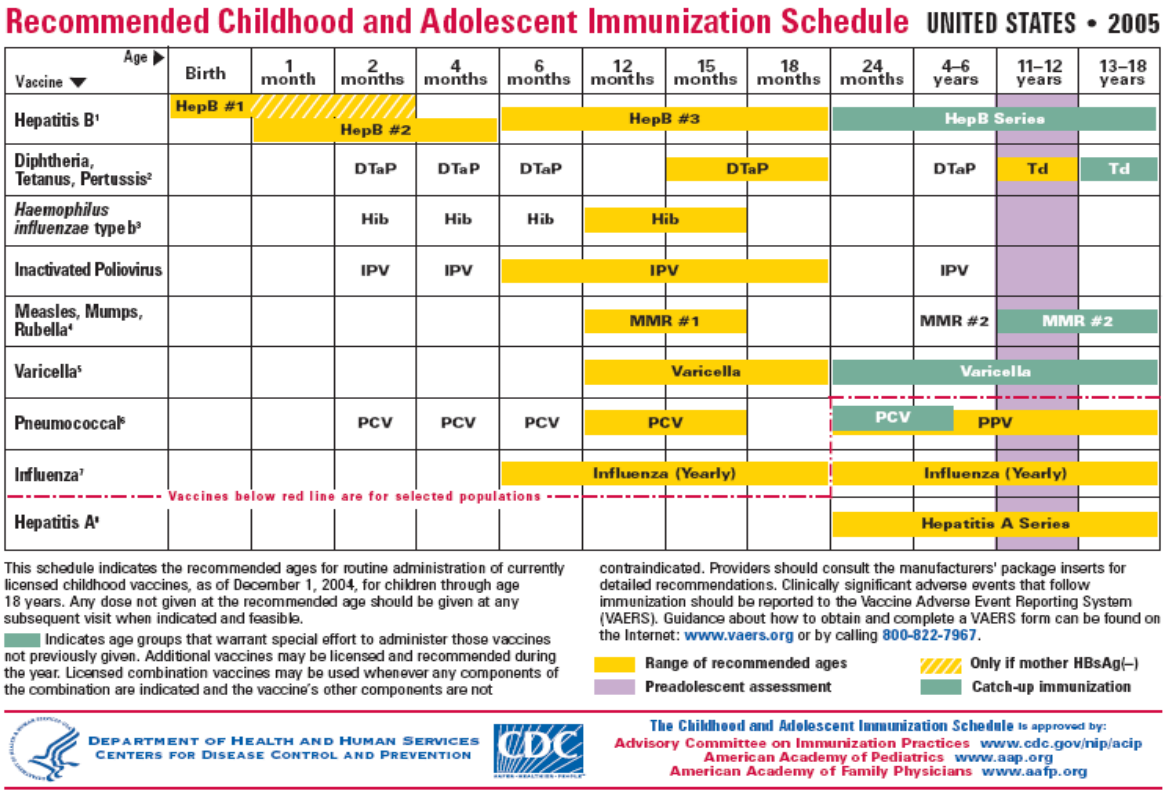


Comparisons to national and other norms – early age immunizations

Given the importance and level of scrutiny given to compliance with immunization schedules, particularly with newborns, we focused our analysis of the 1115 Waiver population's utilization of preventive services against national norms on the degree to which these children received immunizations vis-à-vis the immunization schedule recommended by the American Academy of Pediatrics (AAP), the American Academy of Family Physicians (AAFP) and the Centers for Disease Control and Prevention (CDC).

An illustration of the guidelines is presented as Figure 16. From the schedule it can be inferred that children are expected to receive 13 to 14 immunizations during their first year of life. Based on analysis of the source data provided by the state, on average 1115 Waiver children age 0 to 1 are receiving about 12 immunizations per year, with the HMO population of 1115 Waiver children actually receiving about 13 immunizations per year and the FFS population at closer to 11 per year. The variance between the utilization rates of these populations merits further study; this notwithstanding it appears that, at least for this key service, the 1115 Waiver program has been successful at providing children with the appropriate level of medical attention and the right number and mix of services.

Figure 16 *http://www.cispimmunize.org/IZschedule.pdf*



Member Grievances [31]

The Division of Medical Services (DMS) of the Department of Social Services provided us with information related to grievances filed by 1115 Waiver enrollees against their plan or the health care providers with whom they interacted. DMS classified the grievances as follows:

- Quality of Care - the grievance type that would be expected to correlate most strongly with health status; includes grievances such as "provider treatment not helping", "not getting better", "lack of provider concern" and "concerned about and/or disagrees with diagnosis";
- Timeliness of Appointments;
- Denial of Services;
- Other Medical - "unable to reach provider", "(member) wants new provider";
- Transportation Grievances;
- Interpreter Grievances;
- Denial of Claims;
- Office Waiting Grievances - related to office visits;
- Office Staff Behavior Grievances - can relate to providers or their staff; or,
- Other Non-Medical - "member (inappropriately) charged at time service is rendered", "receiving bills from PCPs, collection agencies, etc." and "place of service not clean", etc.

For this year's report the grievances were compiled for the following periods:

- Period #1: January 2002 to September 2002
- Period #2: January 2003 to September 2003
- Period #3: January 2004 to September 2004

We then computed the average number of grievances per month for each Period. Finally, we converted these averages to per-member per-month statistics by factoring the average number of 1115 Waiver members per month during each Period. These statistics are shown in Figure 17.

Figure 17

Comparison of Member Grievance Activity Between Reporting Periods

		A Grievances during Period	*B* Avg. Grievances per Month	*C* Avg.# Members during Period	*B/(C/1,000)* Grievances/ 1,000 Members/Year
Period #1	1/02-9/02	104	11.6	76,636	1.81
Period #2	1/03-9/03	77	8.6	84,020	1.22
Period #3	1/04-9/04	129	14.3	90,691	1.90

[31] Beginning August 1, 2003, the term *member grievance* was adopted to describe what was previously referred to as a *member complaint*.

While the average number of grievances per member increased by less than five percent between Periods 1 and 3, the increase is quite dramatic – 55 percent – between Periods 2 and 3. Further examination of grievances during Period 3 shows that almost three out of every five of these grievances is tied to one managed care organization (MCO), Healthcare USA. Moreover:

- More than 60 percent of grievances filed against Healthcare USA were associated with denials or delays in getting appointments.
- Almost three-quarters of all grievances tied to denials or delays in getting appointments were filed against Healthcare USA.
- Healthcare USA was the only MCO for which grievances were filed during Period C in the following areas: ER problems, receiving bills (from providers and/or collection agencies), member charge at the time service was rendered, and PCP and office personnel behavior/attitude.

Figure 18 shows additional detail regarding the distribution of grievances by MCO vis-à-vis the distribution of members in each MCO. Healthcare USA is the only MCO in the 1115 Waiver program with a presence in every managed care region, which presumably places it at greater exposure to grievances. That notwithstanding, the number and mix of grievances for this MCO stands out and thus may warrant more in-depth study. In the final analysis it is still the case that, despite the recent phenomenon with this particular MCO, the number of grievances per member per year in Period 3 is consistent with the number from two years earlier and is also quite low.

Figure 18

Comparison of Member Grievance Activity and Enrollment by MCO, Study Period #3 (Jan. 2004 - Sep. 2004):

MCO:	Avg. Enrollees by Week (6/04)	% Total	# of Complaints (Period #3)	% Total
Blue Advantage Plus	4,280	8.7%	3	2.3%
Community Care Plus	4,327	8.7%	4	3.1%
Family Heath Partners	6,508	13.2%	23	17.8%
Firstguard	4,894	9.9%	9	7.0%
HealthCare USA	20,046	40.5%	74	57.4%
Mercy	4,969	10.0%	10	7.8%
Missouri Care	4,439	9.0%	6	4.7%
TOTAL (FOR AVG. ENROLLMENT)	**49,462**		**129**	

Summary and Conclusion

Not withstanding regional variations and variations between service delivery systems that may merit more in-depth statistical study, it appears from the analyzed metrics that the health status of the 1115 Waiver population is, at a minimum, benefiting from appropriate services, such as immunizations, being delivered to the right members at the right time. Moreover, the steady decrease in the avoidable hospitalization use rate for the 1115 Waiver population – it has now decreased for three straight years – is a strong indication that the 1115 Waiver program and related policies are having a positive effect on the health of this population.

RESEARCH QUESTION 3: WHAT IS THE IMPACT OF THE 1115 WAIVER ON PROVIDING A COMPREHENSIVE ARRAY OF COMMUNITY BASED WRAPAROUND SERVICES FOR SERIOUSLY EMOTIONALLY DISTURBED CHILDREN (SED) AND CHILDREN AFFECTED BY SUBSTANCE ABUSE?

Background: About Wraparound Services

As described in the strategic plan for the Department of Mental Health (DMH), over the last twenty years the field of children's mental health has experienced a dramatic paradigm shift away from institutionalization and towards a more holistic, community-based intervention and treatment model. Given that service fragmentation and the over reliance on institutional care were recognized as a major impediment to improving the management of mental health, service coordination and the provision of **wraparound services** have been identified as critical factors for insuring the success of the new model.

Wraparound services (sometimes referred to as "umbrella services") are a class of treatment and support services provided to a child and/or the child's family with the intent of facilitating the child's functioning and transition towards a better mental health state. The services that may be provided under this definition are:

- **Transportation support services** that enable the child and his/her family to access needed services and support;
- **Social and recreational support services** that enable the child and his/her family to participate in activities that s/he would otherwise not be able to be involved in due to distance and/or cost;
- **Basic needs support services** provided on a temporary and/or emergency basis;
- **Clinical/medical support services**, not including traditional outpatient services, that help meet non-behavioral health treatment needs as well as facilitate meeting the child's overall treatment goals; and
- **Other specialized support services** such as crisis management, legal support, basic schooling and vocational training that cannot be met through other means.

DMH and DMS have developed joint protocols and guidelines for the provision of wraparound services. Wraparound services are always fully funded by DMH with general revenue funds, i.e. without Medicaid matching funds. DMH also coordinates and oversees the delivery of these services. The services – and related codes – that Missouri classifies as wraparound services are listed in Appendix II.

Analysis - Service Utilization

In the previous evaluation cycle, our analysis focused on documenting the degree to which 1115 Waiver children were receiving mental health services and the degree to which children receiving mental health services were also receiving wraparound services. To that end we compiled and analyzed eligibility and service utilization data from DMH and DMS on the mental health and wraparound services received during the study period by children in the 1115 Waiver program during the same period. Our ultimate goal – to determine whether HMO enrollment results in a change in how and/or what wraparound services are accessed vis-à-vis children in fee-for-service – could not be met because of perceived completeness and coding problems with some of the data including the eligibility data. In this evaluation cycle we circumscribed our analysis to comparing utilization across service delivery systems.

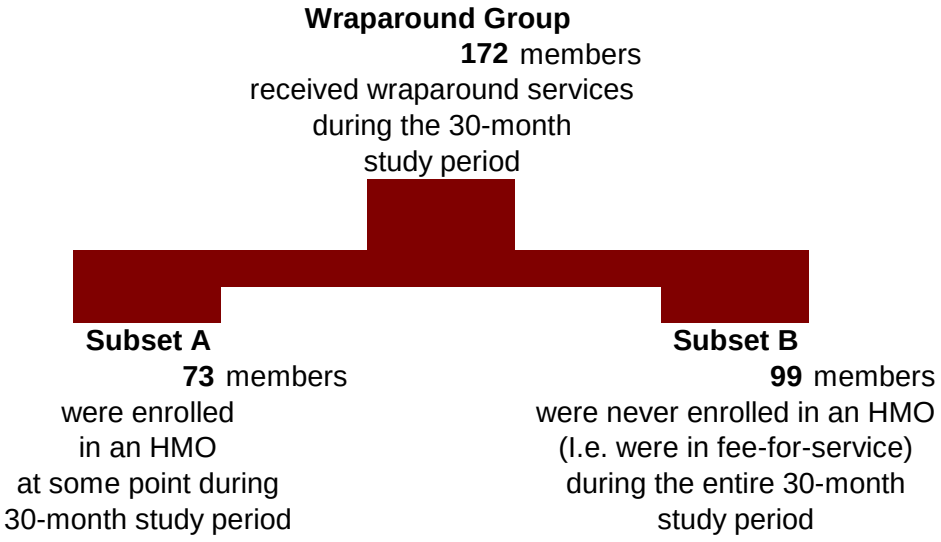
To address this question, we requested service utilization data, eligibility and HMO enrollment data for the period beginning January 1, 2002 and ending June 30, 2004 -– hereafter referred to as the study period. To analyze the data we categorized the subset of the 1115 Waiver population that received wraparound services during the study period ("Wraparound Group") into two subsets:

Subset A – children who were enrolled in an HMO at some point during the 30-month study period

Subset B - children who were in fee-for-service during the entire 30-month study period

Figure 19 illustrates this breakout.

Figure 19: Breakout of 1115 Waiver population that received mental health wraparound services during the Research Question 3 study period.



Aggregate Statistics – Utilization of Wraparound Services (Service Units)

Services rendered (service counts span the 30-month study period):

Proc Desc DMH	Unit of Service	Service Units	*% of Total*
CHILD/ADOLES FAMILY ASSIST	1 hour	3,726	*75.5%*
TARGETED CASE MANAGEMENT SED CM	1/4 hour	939	*19.0%*
FAMILY SUPPORT	1 hour	95	*1.9%*
RESPITE SRVCS /SHARED UNIT-	1 month	92	*1.9%*
FAMILY SUPPORT PRESCHOOL	1 hour	80	*1.6%*
TOTAL		**4,932**	

Statistics by Subset – Utilization of Wraparound Services (Service Units)

- **SUBSET A** *Member in an HMO at some point during the study period and while he/she was 1115 Waiver-eligible*

Proc Desc DMH	Total	*% of Total*
CHILD/ADOLES FAMILY ASSIST	2,270	*94.0%*
FAMILY SUPPORT	94	*3.9%*
RESPITE SRVCS /SHARED UNIT-	52	*2.2%*
Grand Total	2,416	

  - Average # of service units per child: 33.1
  - Average months of eligibility per child during the study period: 15.0
  - Average # of service units per child per month of eligibility: 2.2

- **SUBSET B** *Member in fee-for-service for the entirety of the study period and while he/she was 1115 Waiver-eligible*

Proc Desc DMH	Total	*% of Total*
CHILD/ADOLES FAMILY ASSIST	1,456	*57.9%*
FAMILY SUPPORT	1	*0.04%*
FAMILY SUPPORT PRESCHOOL	80	*3.2%*
RESPITE SRVCS /SHARED UNIT-	40	*1.6%*
TARGETED CASE MANAGEMENT SED CM	939	*37.3%*
Grand Total	2,516	

  - Average # of service units per child: 25.4
  - Average months of eligibility per child during the study period: 12.9
  - Average # of service units per child per month of eligibility: 2.0

Observations

- According to enrollment reports provided by DMS, on average more than half of the children in the 1115 Waiver program are enrolled in an HMO (for instance, in June 2004 close to 50,000 1115 Waiver children were enrolled in an HMO against total enrollment of about 91,000). Given that the majority of children that received wraparound services during the study period were never enrolled in an HMO, it could be argued that 1115 Waiver children in fee-for-service have an easier time accessing these services. Nevertheless, these statistics alone are not conclusive evidence of this.
- Subset A recipients tended to be 1115 Waiver-eligible for a longer time period (15 vs. 13 months on average).
- That notwithstanding, Subset A recipients utilized a higher <u>average</u> number of wraparound service units than Subset B recipients (2.2 service units per child per month of eligibility vs. 2.0 for Subset B recipients).
- *Child/Adolescent Family Assistance* is the wraparound service most utilized by Subset A and Subset B recipients
- There are significant differences in the mix of services used by Subset A and Subset B recipients:
    - Only Subset B recipients received Targeted Case Management services.
    - In effect, only Subset A recipients received Family Support services.
    - Only Subset B recipients received Preschool Family Support services.
    - While recipients from both subsets were the beneficiaries of Respite services, Subset A recipients utilized these at a higher rate – 51 percent higher – than Subset B recipients.

Summary and Conclusion

At first glance the analysis does not reveal access restrictions to any particular wraparound service. Moreover, a comparison of the utilization of these services across service delivery systems suggests that <u>in the aggregate</u> there may be no disparities in the degree to which these services can or are being accessed. These observations, coupled with the observations from last year's evaluation (refer to Appendix III) suggest that the 1115 Waiver population has been able to access these services at a rate which, at a minimum, may be beginning to address the mental health needs of a population which otherwise would not have access to these services. However, these assertions cannot be treated as conclusive or as a comprehensive answer to the Research Question until:

- A more detailed baseline assessment of the mental health needs of the 1115 Waiver population is conducted and documented;
- A more thorough analysis of the mental health services these children are receiving is performed using more precise diagnosis and service utilization data (this may require profiling the utilization of services by specific children as part of a statistical study); and,
- Benchmarks (either national or specific to Missouri or its 1115 Waiver population) for utilization of the services being analyzed are available for use.

RESEARCH QUESTION 4: WHAT IS THE EFFECT OF THE 1115 WAIVER ON THE NUMBER OF CHILDREN COVERED BY PRIVATE INSURERS? DOES THE 1115 WAIVER EXPANSION TO COVER CHILDREN WITH A GROSS FAMILY INCOME ABOVE 185 PERCENT FPL HAVE ANY NEGATIVE EFFECT ON THESE NUMBERS?

In answering whether the 1115 Waiver is impacting the number of children covered by private health insurance—most frequently through their parents' employer-sponsored coverage—we are seeking to answer whether there has been any "crowd-out." Crowd-out, defined as a shift from private health insurance coverage to public coverage, generally occurs in one of three ways:

1. an individual drops private coverage for public coverage;
2. an enrollee with public coverage refuses an offer of private coverage (does not "take-up" the coverage); or
3. employers take actions—which they would not have taken in the absence of public coverage—with the intent of driving employees to drop private coverage and take public coverage (for example, they increase premium contributions with that purpose in mind, or drop certain types of coverage such as dependent coverage).[32]

Measuring Crowd-out

At a basic level, one could determine the existence and extent of crowd-out by analyzing the mix of private and public coverage before a public program expansion and compare it to the mix after the program expansion was implemented. The theory is that, all else being equal, a decrease in enrollment in private insurance occurring in the same timeframe as an increase in public coverage is evidence of crowd-out. That is, of their own volition, enrollees in private insurance have decided to avoid costs and switch to publicly-funded medical assistance for which they are eligible or employers have acted to discourage their employees from taking-up their offers of coverage or have opted not to provide health insurance.

Applying this assessment method is complicated, however, by the fact that all other things are not equal. While specific data are unavailable for Missouri (although similar trends are likely), at the national level there have been:

[32] Davidson, G., L. A. Blewett, & K. T. Call (June 2004). *Public Program crowd-out of private coverage: What are the issues?* The Robert Wood Johnson Foundation: Research Synthesis Report No. 5.

- Declines in the availability of employment-based health insurance—a national employer health benefits survey conducted annually estimates that there are at least 5 million fewer jobs offering health insurance in 2004 than there were in 2001, largely driven by the actions of small firms[33]; and
- Increases in employee contributions (premiums) for health insurance, particularly for dependent coverage. This same survey found that, while the average monthly contribution (or premium) for single coverage has not changed the premium for family coverage grew by 10 percent from 2003 to 2004. This increase came on top of a 13 percent increase from 2002 to 2003 and a 19 percent increase from 2001 to 2002.

Moreover, in analyzing whether crowd-out has occurred it is necessary to determine whether employers are taking actions—which they would not have taken in the absence of the public coverage—because they hope to steer the employees away from employer-sponsored coverage and towards public coverage. This is difficult to determine because employers are experiencing annual increases in their costs related to providing health insurance, which may compel them to increase employee contributions and/or stop providing coverage regardless of the existence of expanded public programs.

On the employee side, effectively measuring crowd-out means knowing that employees have chosen not to take up the employer-sponsored coverage because they have determined they can save money by enrolling in a publicly funded program. Again, determining what motivates people to act in certain ways is not easy. For example, employees may not take-up dependent coverage because premiums have risen by 10 percent; the existence of an expanded public program does not necessarily play into their decision.

National Studies

Because of the inherent challenges in quantifying crowd-out, and the importance of the issue to policy makers, much research has been done in this area. Despite all of this research, there is no consensus on the prevalence of crowd-out. A 2004 synthesis paper compiled by the Robert Wood Johnson Foundation summarized the findings of 25 different models developed to measure the effects of crowd-out. The crowd-out percentage estimates from these models varied widely, from virtually zero to upwards of 75 percent (not all of the findings were statistically significant). [34] The wide range in these

[33] The Kaiser Family Foundation and Health Research and Educational Trust. (2004). *Employer Health Benefits 2004 Annual Survey*.

[34] Davidson, Blewett & Call (June 2004).

estimates is due to differences in the data (for example the way it is collected), different assumptions in developing the model (for example, assumptions about how changes in the economy would affect private coverage), differences in the programs which have been studied (e.g. state differences or differences in income thresholds), and the inherent challenges in ascertaining the motivations of both employers and employees.

There is, however, some consensus that certain factors do influence the magnitude of crowd-out, including medical assistance program income eligibility thresholds—the higher the threshold, the greater the likelihood of crowd-out. A study cites 200 percent of FPL as being a key threshold that was triggering crowd-out; this makes sense in that individuals (or their parents) with higher incomes are more likely to have employer-sponsored health insurance available to them.[35]

In sum, there is no consensus on the magnitude of crowd-out and, as evidenced by the models that showed no crowd-out effects, if it occurs at all.

Missouri Studies

Previous evaluations of the 1115 Waiver have found no conclusive, definitive or irrefutable evidence of crowd-out and the authors have concluded that the change in the insurance status of children is most likely the result of other drivers, for example increases in employee contributions and/or increasing unemployment rates.[36]

Although they did not specifically address the issue of crowd-out, the State recently completed a series of focus groups with 64 employers and interviews with 34 individuals with a variety of health care backgrounds (referred to as *key informants* in the report).[37] These interviews, conducted as part of a Missouri State Planning Grant on the Uninsured, covered a variety of issues regarding private health insurance, the uninsured, health care services, and employer activities as it relates to providing employer-sponsored health insurance. Many of the questions, answers, and comments are not pertinent to this research question but certain sections of the final report do contribute to this analysis. Specifically, among the employers who do offer health insurance:

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[35] Davidson, Blewett & Call (June 2004).

[36] Alicia Smith & Associates, LLC. (2004). *Evaluation of the Missouri Section 1115 Waiver. Review Period: September 1, 2002 – August 31, 2003.*

[37] Martin, J., H. Altena & D. Duitsman. (August 2004). *Final Report: Summary of Health Insurance Focus Groups and Key Informant Interviews.* Southwest Missouri State University Ozarks Public Health Institute.

- Most reported that they have some employees who decline health insurance offered by them, usually because it is too expensive or they have spousal coverage. Interviewees reported particularly low take-up rates for family coverage, nearly always because of the great expense of family premiums.
- The decision on the amount employees' must contribute to the cost of health care is nearly always dictated by budgetary considerations.
- Nearly all interviewees said they had made changes to their health plan offerings recently. These changes usually entailed cutting benefits (such as dental or vision) and/or increasing deductibles and premiums. Generally employers expressed frustration at passing along greater costs to their employees, but felt they had no other choice.
- Nearly all employers said they would never drop coverage because they feel it is a valuable benefit, plus they may be compelled to offer it to remain competitive and attract quality employees. A few did concede that they would consider dropping coverage if it became absolutely unaffordable, but only as a last resort.

Among those employers who do not offer health insurance, the resounding response as to why they did not was, "cost." Many of these employers said they would very much like to provide health insurance but simply could not afford to do so.

To summarize, cost is the driving consideration for all employers, both those who do offer health insurance and those who do not. Not one of the employers indicated that they considered the existence of public coverage in making decisions about their own employee-sponsored health insurance activities. Moreover, of those employers who gave explanations of why their employees did not take-up the offer of health insurance—either individual or family—no one indicated that public programs were a factor.

While no interviewee stated that public coverage was a factor in their own decisions and/or in employees' decisions to accept the coverage, the interviewees in this series of focus groups and interviews were not specifically asked such questions. In order to better inform the response to this research question we conducted a series of short telephone interviews with businesses located in the State. We obtained the names of companies from three local Chambers of Commerce and the Missouri Small Business Development Center. We spoke with 18 employers who provided us with general information about their companies and anecdotal information about their health insurance plans. In addition, two representatives of Chambers of Commerce spoke with us about what they hear from their members regarding health insurance offerings and take-up rates among employees.

In these interviews we obtained background information on the number of employees in the organization, whether they offer employer sponsored health insurance (ESI); and what they contributed towards individual and dependent insurance premiums. In order to obtain information about crowd-out we asked the employers:

- Whether they consider the existence of public coverage, in particular expanded public programs, in deciding whether to offer ESI and in developing their offerings;
- How many employees take-up individual and dependent coverage; and
- If they were aware of any employees who opted out of dependent coverage because they were aware of the Medicaid program and were going to enroll their children in it.

The companies range in size from fewer than ten employees to more than 1,000. Specifically:

- 8 "small" companies had 25 employees or fewer;
- 1 had 50 to 100 employees;
- 8 had 100-500 employees; and
- 1 had 1,000 or more.

Of these eighteen companies,

- Fifteen (83 percent) provide ESI to their employees.
- Of the fifteen, nearly all pay between 50 to 100 percent of the premiums for their employees.
- Four of the eight small companies pay 100 percent of the premiums).
- Only one company does not contribute towards health insurance premiums.
- The fifteen companies that offer ESI to its employees also offer family/dependent coverage.
- However, nine of these fifteen companies do not contribute at all to the premiums for dependents. Of those that do contribute to dependent premiums, the share ranges from 40 percent to 85 percent.

There is no conclusive evidence of crowd-out based on the responses of employers to the questions regarding their own decisions about ESI offerings - none of these employers indicated they consider the existence of public programs, in particular the 1115 Waiver, in developing their ESI offerings. As with the companies interviewed for the Planning Grant on the Uninsured, employers cited cost as a primary reason for changing their ESI offerings. One employer said they had recently reduced the percentage they paid and another indicated that they were going to begin paying a portion of the premium for dependent coverage in lieu of increasing wages. Several employers added that they do not consider public programs in developing their ESI offerings because many of their employees are in higher-income brackets and would not be eligible for public coverage.

Regarding take-up rates of ESI and, in particular, take-up rates for dependent coverage, many of the employees with whom we spoke said there have not been noticeable changes over the last several years. Several employers indicated that no employee in their firm has children or that the employee's children were covered under a spouse's ESI.

It is not possible to conclude that crowd-out is occurring based strictly on employer anecdotes of employees who did not purchase ESI for their children because they planned to enroll their children in Medicaid (including the 1115 Waiver program). Although seven employers and one Chamber of Commerce representative provided anecdotes about a few employees—no more than three or four per year and frequently only one—that declined coverage because they were going to enroll their children in Medicaid, these stories should not be construed as statistically indisputable evidence of crowd-out given that other factors may have played into the employees' decisions[38]. For example, several employers suggested that some of these employees might have declined coverage even in the absence of the 1115 Waiver because they could not afford the premiums. Another employer indicated that due to its 90-day waiting period and high turnover rates many of its employees never become eligible for ESI. There is no crowd-out in these scenarios because the employees did not explicitly select the 1115 Waiver program in lieu of ESI; rather their decision was driven primarily by cost or other factors. Moreover, two of these seven employers noted that they had employees take up ESI after initially declining it because the State had strongly encouraged them to take the ESI and not rely on the 1115 Waiver.

Analysis

Although there has been an increase in the number of children with private insurance, specifically the increase in the number of children in the waiver program, and a decrease in the number of children with private health insurance we can not conclude that crowd-out has occurred. This is because the basic analysis of comparing the mix of private and public coverage before a public program expansion to the mix after the program expansion was implemented is only accurate when all other factors are unchanged. In Missouri there have been several additional changes to the availability and cost of employer-sponsored health insurance. Concurrent with the implementation of the 1115 Waiver the unemployment rate has increased and employers have faced dramatic increases in the cost of providing health insurance. In many cases they are passing the increased costs to their employees in the form of increased premiums and co-pays. Moreover, based on national data, fewer jobs actually offer health insurance at all. Because we cannot determine whether the increase in Medicaid enrollment and the

[38] All seven employers had 100 or more employees and four of them paid a portion of the dependent premiums.

decrease in the number of children with private insurance coverage is a result of these other factors the numbers do not support a conclusion that crowd-out is occurring.

The employee interviews also do not support a definitive conclusion that crowd-out is occurring, although some of the anecdotes suggest there may be sporadic, isolated occurrences of crowd-out. There are, however, additional circumstances influencing employee decisions that are still not known. For example, as stated above, some of these employees might have turned down ESI even without the 1115 Waiver because they could not afford the premiums.

Specifically referring to the second part of the question of whether the 1115 Waiver expansion to cover children with a gross family income above 185 percent FPL has a negative effect on these numbers, for the reasons given above it is not possible to definitively conclude that the expansion has driven down the numbers of children with private health insurance. Answering this question is further complicated by the fact that we do not know the family incomes of children who have lost private health coverage. While we do know that over the past year there have been enrollment increases in the two eligibility categories covering children above 185 percent of FPL, we do not know if children in these income groups are also losing private health insurance. These children may have been uninsured prior to enrolling in the 1115 Waiver or, as conversations with state employees suggest, were in the no premium groups originally (the state has been more closely monitoring income levels to ensure that children are placed in the appropriate eligibility category).

Summary and Conclusion

In summary, there are potential indicators—the increase in Medicaid enrollment and the decrease in private insurance enrollment as well as anecdotes that people are refusing ESI for their dependents because they are eligible for the 1115 Waiver—but there is not enough evidence to support a conclusion that crowd-out is occurring. Most likely, the increase in Medicaid enrollment and the decrease in private insurance enrollment are due to economic conditions such as increases in unemployment, a reduction in the number of jobs that provide health insurance, and increased cost shifting of health insurance premiums by employers to employees. In the absence of the 1115 Waiver many children who lost ESI would have joined the ranks of the uninsured. Similarly, there is no guarantee that those employees who opted not to take-up ESI for their dependents would have selected it in the absence of ESI. It is possible, even likely, that as some employers suggested, these individuals would have declined coverage anyway because they could not afford the dependent premiums. The result would be an increase in the number of uninsured children.

In light of the data and anecdotes, the State might benefit from closer examination of its Medicaid enrollment practices to see if they should be more thorough in determining whether potential enrollees have access to private coverage. With better information, the state would be better positioned to address potential crowd-out by channeling certain individuals to ESI.

RESEARCH QUESTION 5: HAS THE 1115 WAIVER AMENDMENT IMPROVED THE HEALTH OF THE INDIGENT OF ST. LOUIS CITY?

In this evaluation cycle, our response to this research question focuses on recent developments associated with the broader goals of the St. Louis Waiver Amendment as well as on the impact that the now fully-outpatient ConnectCare operation is having on providing services to the medically indigent, as derived from activity data provided to us by ConnectCare.

Background: About the St. Louis Waiver Amendment

The **St. Louis Waiver Amendment** authorized a demonstration to transition St. Louis ConnectCare (ConnectCare) to an outpatient system of care and, ultimately, to facilitate the creation in the St. Louis region of a long-term viable "safety net" system of care for the medically indigent. To that end a portion of Disproportionate Share Hospital (DSH) funds was made available under the demonstration. Additionally, the following key benchmarks were tied to the demonstration's authorization:

1. The ongoing reporting of ConnectCare activity and costs;
2. The formation of Planning Work Groups to review regional health care issues;
3. The compilation and analysis of area data for use in strategic health planning and policy development; and
4. The preparation of a strategic plan and an implementation plan for delivery of health care services to the medically indigent population in the St. Louis area.

Developments Related to the Waiver Amendment Benchmarks

In October 2003 the St. Louis Regional Health Commission (RHC), the organization charged with addressing benchmarks (2) and (3), released its Recommendations for Improving the Delivery of Safety Net Primary and Specialty Care Services in St. Louis City and County. These recommendations outlined the plan to successfully transition the safety net system of care in St. Louis to a viable, "self-sustaining" model. The Commission's recommendations addressed:

- Improving the integration and financing of the safety net health system;
- Improving safety net care coordination;
- Improving availability of specialty care services;
- Reducing cultural and information barriers to accessing health care; and,
- Improving measurement and reporting.

ConnectCare was expected to be a key component of this model.

A couple of major developments have occurred since the publication of this report:

- The St. Louis Integrated Health Network (IHN) was formed as a partnership of primary and specialty medical care providers in St. Louis City and County. ConnectCare, along with Saint Louis University, Washington University and the Saint Louis County Department of Health, are major player in the IHN. The stated goal of the IHN is to "ensure access to health care for uninsured and underinsured children and adults"[39] through – in direct response to the RHC's recommendations - increased integration and coordination of a health care safety net. In addition to funding that was beforehand available to the IHN partners, the IHN received a grant from the federal Health Resources and Services Administration (HRSA). RHC 2004 survey data suggests that the providers in the IHN offer medical services to two-thirds of those identified as medically underserved in the St. Louis City and County area.

- The RHC released the Community Health Infrastructure Assessment for St. Louis City and County.[40] The assessment focused on community-based primary and secondary prevention services in that region, and honed in more specifically on ten health areas including asthma, HIV/AIDS and STDs, maternal and child health, cardiovascular disease and Type-2 diabetes. By and large, the assessment's conclusions are in line with the phenomena that gave rise to the RHC's recommendations:

1. A wide array of organizations – schools, places of worship, community health centers, hospitals – provide varying, sometimes overlapping primary and secondary preventive services. The emphasis given to primary versus secondary prevention services across the ten health areas also varied.
2. Funding for the aforementioned services originated from numerous sources and was made available through a variety of mechanisms. The sources of funding were not particularly easy to identify and were not always stable. Additionally, it was estimated in the study that the funding specific to the aforementioned services was in the $10 million to $15 million range[41], a range that was not deemed to be substantial.
3. Only a few provider organizations could identify the "target populations" for the aforementioned services, and the populations deemed "high-need" were not always or consistently targeted.

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[39] http://www.stlouisihn.org/m_aboutus.php

[40] http://www.stlrhc.org/documents/fullreport6.14.05.pdf

[41] http://www.stlouisihn.org/m_aboutus.php, p.5

4. The organizations providing these services lack the capacity, including the right levels and mix of staff, to meet the need for the services.

About ConnectCare

Having completed its transition to an outpatient system of care, ConnectCare is comprised of five ambulatory health centers (AHCs), an urgent care center (UCC) and a stand-alone dialysis center. All St. Louis city residents and insured St. Louis county residents have direct access to the services provided at these facilities, whereas uninsured St. Louis county residents can be referred to ConnectCare after first visiting a county health clinic.

ConnectCare's overall annual costs are approximately $29 million. In addition to the DSH funds available through the Waiver Amendment, ConnectCare also receives substantial financial support from the state, St. Louis city and St. Louis County.

ConnectCare service and patient profile

At this juncture it should be noted that service utilization statistics provided in the previous evaluation may differ from those provided in this evaluation. Methods of recognizing and reporting service activity (encounters, procedures, etc.), a reduction in the number of locum tenens physicians and the outsourcing of lab and dialysis services are causing some of these differences.

In this evaluation we expand on last year's examination of the potential impact that ConnectCare has had on extending needed health care services to the Medicaid and Uninsured populations. In last year's evaluation we noted that ConnectCare plays a vital role in serving Medicaid and Uninsured patients in the St. Louis region, specifically:

- The majority of ConnectCare patients were uninsured – self-pay or indigent – or Medicaid beneficiaries. Moreover, adults without children, a population which often is not eligible for medical assistance programs, made up a significant percentage of ConnectCare patients.
- ConnectCare is providing access to both primary care and specialty services; specialty services made up 45 percent of all services provided.
- The presence of the UCC was proving essential to expanding the availability of after-hours care in the St. Louis region. In the first six months of operation, The Medicaid and uninsured populations accounted for almost 75 percent of urgent care visits to the UCC, and the uninsured population alone accounted for 62 percent of visits.

Analysis of the most recent service utilization data provided by ConnectCare and long-term trends in ER utilization paints an intriguing picture of possible changes in utilization levels and patterns:

- Continuing a trend that was noted in last year's report, utilization of the AHCs decreased by 8.5 percent between fiscal years 2002-2003 and 2003-2004 (ref. Figure 20). The annual rate of decrease between calendar years 2001 and 2003 was 8.8 percent.
- Also continuing a trend noted last year, UCC encounters increased by almost 23 percent between those same two fiscal years and are now at approximately 2,400 per month.
- Services associated with ConnectCare's gastroenterology, orthopedics, cardiopulmonary, radiology and family practice departments experienced significant increases between the two fiscal years. Significant decreases were experienced in other services including OB/GYN, oncology, pulmonary and pediatrics. ConnectCare management noted that the number of visits for ConnectCare's employed physicians has remained fairly consistent, with the decrease in utilization of physician services being attributed mostly to the large reduction in the number of *locum tenens* physicians.

Figure 20

ConnectCare encounters by facility, Fiscal Years 2002-2004

"Encounters" as defined by ConnectCare

Facility Name/Type:		Encounters, FY 2002-2003	Encounters, FY 2003-2004	Diff., 2002-2003 to 2003-2004
Max Starkloff	AHC	48,257	38,390	
Homer Phillips	AHC	30,245	26,693	
Lillian Courtney	AHC	41,045	41,183	
Florence Hill	AHC	15,694	17,450	
Subtotals,	**AHC**	**135,241**	**123,716**	**-8.5%**
Smiley	**UCC**	**23,377**	**28,698**	**22.8%**

Key:	
AHC	Ambulatory health center
UCC	Urgent care center

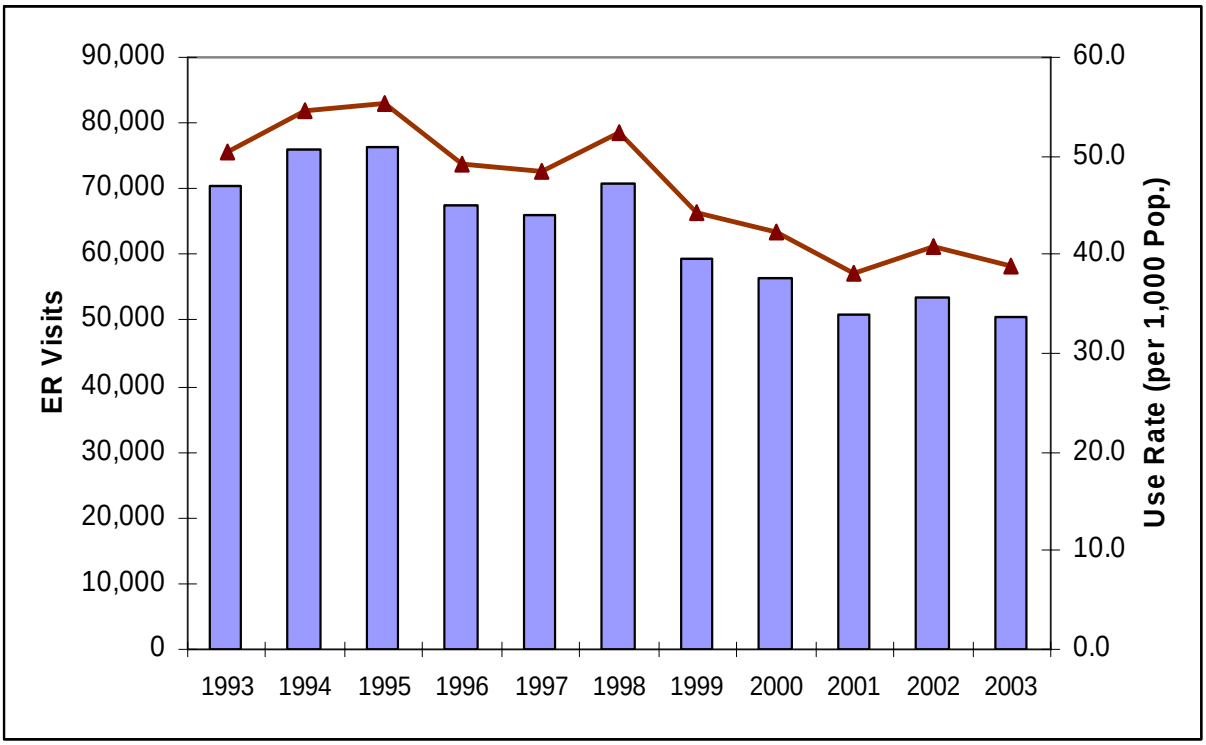
- After reaching 76,000 visits in 1995 and 71,000 visits in 1998, ER utilization by the medically indigent in St. Louis city and St. Louis County has experienced a noticeable decrease since 1998 with less than 51,000 visits in 2003. Additionally, the use rate of ER services by this population has also decreased from a five-year average of 52 visits per 1,000 population from 1994 to 1998 to 41 visits per 1,000 population from 1999 to 2003: a 21 percent reduction (ref. Figure 21).

Summary and Conclusion

The creation of the Integrated Health Network (IHN) bodes positively for the realization of the viable, self-sustaining safety net envisioned when the Waiver Amendment was authorized. While it may take several years for the IHN to truly coalesce and improve safety net care coordination, it is without a doubt a step in the right direction. Additionally, the completion of the infrastructure assessment is another milestone in the implementation of the Regional Health Commission's recommendations. Both of these developments should have a long-term positive impact on the health of indigent St. Louisians.

Figure 21: Emergency room utilization by the "self pay/no charge" population in St. Louis city and St. Louis County, 1993-2003.

Data Source: Missouri Department of Health and Senior Services



The statistics associated with ConnectCare and ER utilization by the medically indigent in St. Louis city and County are more of a “mixed bag”. It appears that utilization of ConnectCare services decreased between 2002 and 2004, but in and of itself this reduction in use may not be having a detrimental effect on the health status of indigent St. Louisians, nor is it proof that their overall health status has improved. Moreover, the reductions in ConnectCare utilization are not necessarily suggestive of access barriers. Additionally, it is not altogether clear whether the ER utilization trend, which started before the transformation of ConnectCare, is being directly influenced by the “new” ConnectCare, particularly the presence of the AHCs and the UCC. Finally, the UCC continues to experience increases in utilization which could be indicative of a continuing trend towards more appropriate utilization of certain services. These phenomena clearly merit further study in the broader context of the impact that the IHN will have - or already may be having – in how certain populations are accessing health services as well as the impact on their health status.

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